



GOVERNMENT OF UTTAR PRADESH
REPORT
OF THE
FACT FINDING COMMITTEE

(Large-Scale Industries)

1956

नमो भगवते वासुदेवाय

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INTRODUCTORY

The Background—The Second Conference of the representatives of State Financial Corporations had recommended that the State Governments should conduct Industrial Surveys in their respective areas so that prospective entrepreneurs might know about the suitability and scope for various industries for development in such areas and it might be possible to fix priorities under the Second Five-Year Plan.

2. A scheme for the Survey of Small-Scale, Medium and Village Industries had already been sanctioned by the Uttar Pradesh Government. The possibilities of initiating large-scale industries in the State also needed to be investigated.

3. *Appointment of the Committee*—Accordingly a Fact Finding Committee was constituted by the Government of Uttar Pradesh in Industries Department *vide* Office Memorandum no. 650/XVIII-B, dated the 24th February, 1956, consisting of the following :

Chairman

- (1) Sri B. M. Birla, 8, Royal Exchange Place, Calcutta.

Members

- (2) Sir L. P. Misra, General Manager, Hindustan Motors Ltd., 8, Royal Exchange Place, Calcutta.
(3) Prof. B. N. Das Gupta, The University, Lucknow.
(4) Sir Padampat Singhania, Kamla Tower, Kanpur.
(5) Sri J. K. Srivastava, "Kailash", Kanpur.
(6) Sri Ram Ratan Gupta, Bihari Niwas, Kanpur.
(7) Sri M. R. Jaipuria, "Swadeshi House", Kanpur.
(8) Sri R. P. Nevatia, M.P., Hindusthan Sugar Mills Co. Ltd., Golagokarannath, District Lakhimpur-Kheri.
(9) Sri K. K. Birla, 8, Royal Exchange Place, Calcutta.
(10) Col. B. H. Zaidi, M. P., 15, Curzon Lane, New Delhi.
(11) Pt. Munishwar Dutta Upadhyay, M. P., 29-C, North Avenue, New Delhi.

- (12) Sri Santokh Singh, M. L. C., Sugar Factories, Pilibhit.
- (13) Sri Paripurnanand, M. L. A., Lakshmi Rattan Quarters, Darshanpurwa, Kanpur.
- (14) Sri Deokinandan Vibhav, M. L. A., Agra.

Member-Secretary

- (15) Director of Industries, U. P., Kanpur.

4. The Committee was authorized to co-opt, if it so desired, any of the following Officers of the Government :

- (i) Joint Secretary to the Government of Uttar Pradesh, Forest Department.
- (ii) General Manager, Kanpur Electric Supply Administration, Kanpur.
- (iii) Honorary Director, Geology and Mining, U. P.

The co-opted members were given all the rights and privileges of the Committee in respect of the enquiry except that they would not have the right to vote and would not sign the report.

5. The Committee was authorized to form sub-Committees, if it so desired, for particular purposes as it deemed necessary or expedient.

6. *Vide* Office Memorandum no. 1462-EP/XVIII—B, dated the 7th April, 1956, the Government appointed Sri R. B. Saksena, I. A. S., Joint Director of Industries, U. P., as Joint Secretary of the Committee.

The Headquarter of the Committee was located at Kanpur and the Committee was authorized to visit such places, as it considered necessary for the purpose of the enquiry.

7. *Additional Members*—The Government, *vide* Office Memorandum no. 1379-EP/XVIII—B, dated the 23rd March, 1956, nominated the following persons as additional members of the Committee.

Additional Members

- (1) Maharaj Kumar Balendu Shah, M. L. A., Jopling Road, Lucknow.
- (2) Sri Gopi Nath Dikshit, M. L. A., Kanpur.
- (3) Kunwar Guru Narain, M. L. C., Maurawan, District Unnao
- (4) Sri Goojar Mal Modi, Modinagar, Meerut.
- (5) Sri Rameshwar Prasad Bagla, Kanpur.

8. *Terms of Reference*—The terms of reference of the Committee as contained in Office Memorandum no. 650/XVIII—B, dated the 24th February, 1956, were “To make recommendations for the development of new industries in the State, particularly with a view to exploit available potential resources of power, raw materials, and minerals in U. P.”

9. *Additional terms of reference of the Committee*—The Committee was further asked by the Government in their Office Memorandum no. 1379-EP/XVIII—B-107H/55, dated 31st March, 1956, “to examine the ways and means and make recommendations as to how the factories now lying closed in U. P. could be started again”.

10. The Director of Industries, U. P., the Member-Secretary of the Committee could not participate in the deliberations of the Committee held at Ghaziabad and Kanpur on the 25th May and the 28th and 29th June, 1956, respectively owing to illness.

11. *Changes in the personnel of the Committee*—Sri Santokh Singh, M. L. C., a member of the Committee died of an accident before the August meeting of the Committee was held and, therefore, the Committee functioned without him thereafter. The Committee places on record its high sense of appreciation for the co-operation received from the late Sri Santokh Singh.

12. *Method of Enquiry*—The Committee held its first meeting at Ghaziabad on the 25th May, 1956. The meeting was attended, besides members, by the representatives of such Government Departments like Sales Tax, Irrigation, Agriculture, Cane Development, Forest, P. W. D., Statistics, etc., as could render help in the work of the Committee.

13. *Appointment of Sub-Committees*—After general discussions on the procedure of work of the Committee and the lines on which statistical data were to be collected, the Committee appointed two sub-committees one to study hindrances (including taxation policy of the State Government) which were standing in the way of further development of existing industries and the establishment of new ones and another to investigate into the causes of closure of mills and suggest ways and means of starting them again. They were asked to complete their investigations and submit their reports by the 15th of

June, 1956. Personnel of the two Sub-Committees was as follows :—

(1) *Sub-Committee on Hindrances*

- (1) Pt. M. D. Upadhyay, M. P.—*Chairman*.
- (2) Sir Padampat Singhanian—*Member*.
- (3) Sri R. P. Nevatia, M. P.—*Member*.
- (4) Sardar Santok Singh, M. L. C.—*Member*.
- (5) Sri M. M. Siddiqi, I. A. S., Sales Tax Commissioner, Uttar Pradesh.

Sri A. P. Dikshit, P. C. S., Deputy Director of Industries, U. P., Sri J. P. Asthana, Regional Marketing Officer, Bareilly and Sri C. Satyamurti, Chief Metallurgist, were deputed to assist the Sub-Committee in its work.

(2) *Sub-Committee on Closed Mills*

- (1) Sri Gopinath Dikshit, M. L. A.—*Chairman*.
- (2) Sri G. M. Modi—*Member*.
- (3) Sri M. R. Jaipuria—*Member*.
- (4) Sri G. D. Bishnoi, Chief Inspector of Factories, U. P.—*Member*.

Sri Bhupendra Bir Singh, P. C. S., Deputy Director of Industries, U. P. and Sri Kunwar Singh, Assistant Director of Industries, U. P. were deputed to assist the Sub-Committee in its work.

14. *Upadhyay Sub-Committee on Hindrances*—The Sub-Committee met after its constitution to decide the procedural matters. In all, five sittings of the Sub-Committee were held, i.e., on the 25th May at Ghaziabad, the 13th June at Kanpur, the 22nd and 23rd June and finally on the 27th June, 1956, at Lucknow.

15. The Sub-Committee issued circulars on the 28th May, 1956, to important Chambers, Trade Associations and prominent industrialists seeking their views on the terms of reference of the Sub-Committee. On receipt of the memoranda, the representatives of the following Chambers and Associations were interviewed on the 22nd and 23rd June, 1956, by the Sub-Committee :—

The President, Upper India Chamber of Commerce, Kanpur ; the Secretary, Northern India Mercantile Chamber of Commerce.

Lucknow ; the Representative of the National Chamber of Industries and Commerce, Agra ; the Secretary, Aligarh Lock Manufacturers and Traders Association, Aligarh ; the Representative of the Kanpur Chemical Works Ltd., Kanpur ; the Chairman, Jaswant Sugar Mills, Meerut City ; the President, the Indian Sugar Mills Association, East U. P. Branch, Gorakhpur ; and the Secretary, U. P. Cycle Manufacturers Co-operative Association Ltd., Kanpur.

16. The Heads of Departments or their representatives were also consulted on subjects pertaining to their individual Departments. On the request of the Sub-Committee, the Railway Board had also deputed their Officer on Special Duty to help them in their work.

17. From the various representations received and personal discussions held, the main difficulties and hindrances as were brought out by the Sub-Committee have been incorporated in their report, which was submitted to the Committee and adopted by it at the second meeting. These form the basis of the materials included in the Report on the subject.

18. *Dikshit Sub-Committee on closed Factories*—The Sub-Committee had its preliminary sitting on the 25th May, 1956, at Ghaziabad after the meeting of the Main Committee. All the members attended, and a tentative programme of work was adopted.

19. The Sub-Committee collected information relating to closed mills from the District Magistrates. A tentative list was drawn up by the comparison of previous lists maintained by the Chief Inspector of Factories, U. P. and with the help of other material that was made available to the Sub-Committee from other sources. The list was prepared both industry-wise and district-wise.

20. The Sub-Committee held nine sittings and examined 24 witnesses. It submitted its report on the 29th June, 1956, and made recommendations for the restarting of the closed units in respect of sugar, oil, textile, refineries, chemicals, starch, cotton waste, iron and steel, jute, distillery and bobbin industries. The report of the Sub-Committee was adopted at the third meeting held on the 2nd of August, 1956. The recommendations of the Sub-Committee form the basis of the material included in the Report on the subject.

21. *Material for the Report*—We must confess that we have been somewhat handicapped on account of absence of detailed statistical information on various subjects which we had to deal with. However,

a number of memoranda were received by the Committee and the Heads of various Departments of the Government fully co-operated with the Committee and made available to it whatever material was in their possession. All the material used in this Report has been drawn from these sources and other published literature of the State and Central Governments. We have done our best, to check upon the accuracy of the material used and if, therefore, there are any inaccuracies, they are to be regarded as inherent in a situation where proper statistical data have not been available at one centralized place. A more detailed treatment of the present position of industrial development in the State would have been useful for future guidance but this has not been possible for the reasons mentioned above. This, however, in no way, we believe, mars the utility of the Report.

22. *Plan of the Report*—The Main Report is divided into ten Chapters : Chapter I deals with the resources of the State. Chapter II describes the present position and problems of large-scale industries existing in the State. Chapter III delineates the pre-requisites of industrial development. In Chapter IV, we have stated the various deficiencies in resources, as well as other factors for industrial growth and have made suggestions for their improvement. In Chapter V, we have examined the hindrances that handicap initiative and effort needed for large-scale development and have pointed out as to how they can be overcome. After having examined the deficiencies and the hindrances, we have indicated in Chapter VI possible lines of development in the sphere of different industries. In Chapter VII we have stated as to how industrial finance necessary for the programme of development we have envisaged, can be raised. In Chapter VIII, we have stated as to how the Government can help industrial development. It may, however, be noted that the directions in which the State can help have been indicated at appropriate places in other Chapters as well. Chapter IX deals with the problems of the closed factories. Chapter X gives a summary of the conclusions, we have arrived at in our enquiry and the recommendations we have made.

23. In this Report, besides giving a programme of development of industries we have devoted our attention on the machinery which would facilitate industrial development generally. We hope that if necessary conditions for progress which we have envisaged are created, a sound basis for further industrialization, in the State, would have been laid.

24. We would like to emphasize that the programme of development that we have envisaged is very largely based on the frame-work of the Second Five-Year Plan. This programme should not be regarded as a plan for self-sufficiency. It only aims at providing a basis for industrial expansion to reduce the heavy pressure of population on land. The reader must not expect to find in this Report the detailed practical information which would enable a particular undertaking to be started. Still less must he regard it as an industrial *vade mecum* to guide him, by short cuts, to fortune.

25. *Acknowledgments*—We take this opportunity to express our gratitude to all individuals, associations, chambers of commerce and other organizations who assisted us in our task. Our special thanks are due to different Departments of the State Government who supplied useful information on various matters relevant to our enquiry. Our labours were greatly lightened by the co-operation we received throughout our enquiry from different sections of the people.

26. To the officers and staff of the Directorate of Industries, we are indebted for the zeal with which they performed their onerous duties. Our Secretary, the Director of Industries was unfortunately not available for a major part of our work. In his absence, Sri M. Samiuddin, I. A. S., the Additional Director of Industries, and Sri R. B. Saxena, I. A. S., the Joint Director of Industries and the Joint Secretary of the Committee, rendered valuable service to the Committee. In spite of his weak health, Sri Shri Pat, I. A. S., attended the last two meetings of the Committee and gave valuable suggestions in connexion with the final draft of the Report. Sri Kunwar Singh, the Assistant Director of Industries, was all along available to the work of the Committee and put in hard work for the Report. A number of other officers of the Directorate particularly Dr. J. B. Lal, Industrial Chemist and Sri Atma Ram, Lecturer, H. B. T. I. helped the Committee in its work. Mention may also be made of Sri M. B. L. Srivastava, Superintendent of Rural Industries, Agra and of Sri T. N. Srivastava, the Industrial Inspector, Lucknow Circle, whose services were made available in connexion with the Committee's work. We wish to express our warm appreciation for the co-operation of a number of other officers of the Government and the staff generally.

27. Through the good offices of the Chairman, the services of Sri R. D. Vidyarthi, Assistant Secretary, Indian Chamber of Commerce, Calcutta, were made available to us in connexion with our work. We wish to place on record our appreciation of the services rendered by Sri Vidyarthi who was of considerable help in drafting the Report.

I. THE RESOURCES OF UTTAR PRADESH

The influence of physical features on the economy of a State is obvious as they are the prime determinants of the products of the region, the occupations of the people, and density and distribution of the population. There are various factors which affect the prosperity of the people and determine the conditions for industrial growth. Development of industries depends upon a number of factors such as availability of raw materials and the outlook of the people, which in turn depend on the physical features and the climate of the region. Therefore, in a study of problems of industrialization, it becomes necessary to take note of these circumstances. The most important fact about U. P. is that her soil is rich and her people are comparatively not well-off. The State has got large natural resources and a large market. Nevertheless, industrially she has remained comparatively a backward State.

2. *The State*—Uttar Pradesh is situated in the northern part of India, bounded in the east by Bihar, in the west by Delhi, Punjab, Himachal Pradesh, and Rajasthan; in the north by Himalayas and in the south by Vindhya Pradesh, Madhya Pradesh and parts of Madhya Bharat. The State stretches from a latitude of 23°. 52' north to latitude 31°. 18' north. The nearest point in the State is at a distance of about 250 miles from coal mines and about 300 miles from steel producing areas whereas Vindhya Pradesh coalfields are nearer but communication is not yet developed. The total area of the State, according to 1951 census is 113,409 sq. miles with a population of 63,215,742. Of the total population, about 54.6 millions live in the rural areas and about 8.6 millions in urban areas. It would thus be observed that about 87 per cent of the population lives in the villages. The size of the State exceeds Great Britain in area and population. The State is divided into 10 divisions with 51 districts. India's total area is 81 crores of acres and population 36 crores. The area of U. P. is 7 crores of acres and the population over 6 crores. Thus, in area, it is about one-eleventh and, in population, about one-sixth of the country as a whole. The land area *per capita* is 1.15 acres as against the all-India average of 2.25 acres.

3. *Physical Features*—The first point to notice about Uttar Pradesh is the extreme physical diversity of the different areas in which the State can be divided from the physical feature's point of view:

(a) *Himalayan Region*—This region lies on the extreme north. It embraces the Himalayas and a wide belt of country densely wooded

at the foot of the hills. This region can be sub-divided into montane which includes almost the whole of Almora and Garhwal and Tehri-Garhwal, Naini Tal Tehsil of district Naini Tal and Chakrata Tehsil of Dehra Dun; and the sub-montane which includes some small tracts of Bhabar in district Almora and Garhwal, the Tarai and Bhabar of district Naini Tal and Tehsil Dehra Dun of district Dehra Dun. The area of this whole region is 19,471 sq. miles which is 17.2 per cent of the total area of the State and contains 25.2 lakhs of people which is 4 per cent of the total population. It is hilly on the north side and rises at places to a height of more than 25,000 ft. The portion of the sub-montane area lying between the Siwalik Hills and the Himalayas and partly on the lower slopes of both is the famous Dun which is known as the Garden of Uttar Pradesh. The Tarai and Bhabar portions are some of the most unhealthy regions of the State. The Bhabar lies immediately below the foot-hills largely covered with forests. The montane area is largely under forest producing valuable timber, but thinly populated and cultivated only in scattered areas.

(b) *The Gangetic Plain*—This region is situated in the south of the Himalayan region. It covers an area of 78,193 sq. miles and has a population of 567.9 lakhs. Thus in area it is 68.9 per cent of the total area of the State and in population 89.8 per cent. It is one of the most fertile areas in the world. The major portion of agricultural production in the State is obtained from this region.

(c) *Hills and Plateau Region*—This region consists of the Central India Plateau and East Satpuras covering an area of 15,745 sq. miles which is about 13.9 per cent of the total area of the State. The population of this region is 39.1 lakhs which is 6.2 per cent of the total. This region differs considerably from the main portion of the State.

4. It would thus be observed that a little less than 70 per cent of the area of the State is included in the Gangetic plain which is noted for fertility of the soil, yet it contains about 90 per cent of the total population with a density of 726 people to a square mile. The mountainous regions of the north and the plateau region of the south are not yet opened up and communication is, therefore, difficult. On the other hand, the whole of the vast Gangetic Plain is easily traversed because of easy means of communication.

One unfortunate fact, however, which greatly affects the economic prosperity of the State is that the rivers, during the monsoon, cause wide distress particularly in eastern U. P. The prosperity of those districts where irrigation works have not yet been laid out depends on the success or failure of the monsoon. This greatly affects the cultivation of crops and those industries which are dependent on them. The State has a wide variation of climate from the permanent snow of the Himalayas to the tropical climate of the plains. Thus, the State possesses a variety of animal and vegetable wealth ranging from the Alpine forests of the Himalayas to the rich harvest of the plains. The diversity of physical features and of climate has produced variations in the density of population as between the hilly regions of the north and the plains.

5. *Population*—The population of Uttar Pradesh has been on the increase for the last 50 years as would be evidenced from the following table :

1901	..	..	..	..	..	4,86,25,310
1921	..	..	..	..	..	4,66,69,865
1941	..	..	..	..	..	5,65,31,848
1951	..	..	..	..	..	6,32,15,742

During the last decade, between 1941-51, the increase in population has been about 12 per cent. It is estimated that a similar increase would take place by 1961 as well. The existing size of the population and its steady increase creates serious problems in respect of employment.

6. The State is the largest populated unit in the country as would be observed from the following table :

					Area (sq. miles)	Population (in '000)
India	..	..	..	..	1,269,640	361,800
Uttar Pradesh	..	..	..	..	113,409	63,216
Bihar	..	..	..	..	70,330	40,226
West Bengal	..	..	..	..	30,775	24,810
Assam	..	..	..	..	85,012	9,044
Madras (including Andhra)	..	..	..	..	127,790	57,016
Bombay	..	..	..	..	111,434	35,956
Madhya Pradesh	..	..	..	..	130,272	21,248
Punjab	..	..	..	..	37,378	12,644
Orissa	..	..	..	..	60,136	14,646

Thus the population in U. P. is a little less than twice of that in Bombay and a little more than two and a half times of that in West Bengal, the two most industrialized States in the country.

7. An overwhelming proportion of this large population, according to 1951 Census, is dependent upon agriculture as is observed from the following table which sets out the classification of the population, according to livelihood :

				(In lakhs)
I. Agricultural—				
(a) Cultivators of land and their dependants	..	..	..	432.85
(b) Cultivating labourers and their dependants	..	..	..	36.12
Total	..	..	..	<u>468.97</u>
II. Non-Agricultural—				
(a) Persons who derive their livelihood from production other than cultivation (including their dependants)	..	..	..	53.01
(b) Commerce	..	..	..	31.80
(c) Transport	..	..	..	8.60
(d) Other services and miscellaneous sources	..	..	..	69.78
Total	..	..	..	<u>163.19</u>
GRAND TOTAL	..	..	..	<u>632.16</u>

8. The percentage of population which is dependent upon agricultural occupations and non-agricultural occupations, in various States, is shown in the following table :

				Agricultural population	Non-agricultural population
India	...	..	..	70	30
Uttar Pradesh	..	..	..	74	26
Bihar	..	..	..	86	14
Orissa	..	..	..	79	21
West Bengal	..	..	..	57	43
Assam	..	..	..	73	27
Bombay	..	..	..	61	39
Madras (including Andhra)	..	..	..	65	35
Madhya Pradesh	..	..	..	76	24
Punjab	..	..	..	64	36

9. From the above table, it would be observed that as compared to industrially advanced States of West Bengal, Bombay, Madras and Punjab, the largest percentage of population is dependent upon agricultural occupations in U. P. Proportion in production, transport, and commerce accounts for only 14 per cent of the population while inclusive of the services and miscellaneous sources it is 26 per cent. As against this, the position, in industrialized States, such as West Bengal and Bombay, is entirely different. In West Bengal, 43 per cent of the population is engaged in non-agricultural occupations, and in Bombay the percentage is 39. Even in Punjab 36 per cent of the population is engaged in non-agricultural occupations. Such a pattern of distribution of the population and the need to raise the standard of living of the people urgently call for the need to find other avenues of employment so that the pressure on land is reduced.

10. Let us also examine as to how the non-agricultural population is distributed over different occupations. The following table gives the percentage of population dependent upon production, commerce, transport and other services in all the important States :

Distribution of Population among Non-agricultural Occupations

(In lakhs)

States	Production		Commerce		Transport		Other services	
	Total	Percent- age	Total	Percent- age	Total	Percent- age	Total	Percent- age
Uttar Pradesh ..	53	8.0	32	5.0	9	1.0	70	12.0
Bihar ..	16	3.9	14	3.4	3	0.7	24	6.0
Orissa ..	9	6.3	4	2.7	1	0.6	16	10.9
West Bengal ..	38	15.4	23	9.2	8	3.4	37	15.0
Assam ..	13	14.8	35	4.0	1	1.4	6	6.8
Madras (including Andhra) ..	70	12.3	38	6.6	10	1.7	82	14.4
Bombay ..	49	13.8	27	7.6	8	2.2	54	15.0
Madhya Pradesh ..	23	10.8	9	4.3	3	1.4	16	7.5
Punjab ..	9	7.3	11	9.0	1	1.4	22	18.0

11. From the above table, it would be observed, that a very minor percentage of the population in U. P. is dependent upon production and still less upon transport as compared to that of Bombay and West Bengal.

12. *Resources*—After having surveyed the position relating to area and population of the State, we now proceed to examine the various kinds of resources that are available in the State.

13. *Agriculture*—The main crops of the State are Wheat, Rice, Barley, Jowar, Bajra, Maize and Gram. The main cash crops on which certain industries are dependent are sugarcane, linseed, rape and mustard, groundnut, til, cotton, jute and sunn hemp. Production of individual cash crops for 1951-55 was as follows :

Commodities	Lakh tons
<i>Oil Seeds—</i>	
Rape and Mustard	5.99
Linseed	1.43
Til	1.18
Groundnut	1.29
Cotton seed	0.15
Castor seed	0.02
<i>Fibres—</i>	
Hemp	0.33
Cotton	0.07
Jute	0.12
<i>Sugarcane—</i>	
Crushed by factories	93.46
Others	190.00
<i>Tobacco</i>	0.12

The total value of these crops came to about Rs.135 crores.

14. Livestock population is of great economic significance to the State for several reasons. Dairy-farming, bone-meals, tanning and leather-working industries draw their raw materials from this source. In Uttar Pradesh, the estimate of livestock population according to 1951 Census, the latest year for which information is available, was as follows :

	(In thousands)
Cattle	23,513
Buffaloes	9,251
Sheep	1,636
Goats	5,224
Horses and Ponies	371
Mules	32
Donkeys	242
Camels	39

U. P. is one of those States where livestock population is considerable. It contributes about 17.3 per cent of the total production of milk in India.

Economically, livestock resources are important for a number of industries as stated above.

15. *Horticulture*—The main horticultural products for which statistics as available are apple, soft fruits, viz. peaches, apricots, etc. and citrus fruits. The total annual production of the four hill districts, the main fruit growing areas of the State, is given below :

Name of district	Apple	Soft fruits	Citrus	Total
	Maunds	Maunds	Maunds	Maunds
Naini Tal	54,000	13,500	..	67,500
Almora	21,000	14,000	..	35,000
Pauri-Garhwal	3,500	875	4,375	8,750
Tehri-Garhwal	875	3,500	4,375	8,750
Total	79,375	31,875	8,750	1,20,000

16. *Mineral*—There are mineral resources in the State, which have not been fully surveyed. Deposits of lime-stone, sand, clays and kankar are found in the State. Deposits of coal exist in Singhrauli in the Mirzapur District. Similarly, in the northern and southern regions of the State, there are other mineral deposits like Copper, Graphite, Gypsum, Iron ore, Magnesite, etc. but they require to be surveyed intensively. The survey report is annexed.

17. *Forest*—Total area under forest is 13,410 sq. miles of which 11,579 sq. miles are under the control of the Forest Department and 1,831 sq. miles are private. The proportion of forest area to the area of the State is 11.82. The chief forest products are timber, fuel, bamboos, bail grass, pine and deodar, resin, katha and lac, etc. The production of chief forest products in 1954-55 was as follows :

Timber.. .. .	..	..	..	..	..	1,21,90,000	c. ft.
Fuel .. .. .	..	..	..	..	..	2,28,55,000	..
Bamboos .. .. .	..	..	..	..	..	1,20,78,000	(nos.)

18. The annual availability of different kinds of forest products can be ascertained from the following table :

*District-wise break-up of natural resources of the Uttar Pradesh
Forests*

Item no.	Raw material	Quantity available annually	Name of district	Remarks
1	2	3	4	5
		Tons		
1	Silver fir and spruce for paper or pulp.	27,000	Tehri-Garhwal.	
2	Bamboo for paper pulp ..	7,000 4,000 4,000	Mirzapur. Varanasi. Garhwal.	
3	Baib grass for paper pulp	10,000 5,000 3,000 1,000 1,000 500	Saharanpur Garhwal Naini Tal Pilibhit Bahrach Kheri Gonda	} Of this 18,000 tons already being given to Star Paper Mills, Saharanpur.
4	Salai (<i>Boswellia serrata</i>) for paper pulp.	10,000 10,000	Mirzapur. Varanasi.	
5	Twisted <i>chir</i> for paper pulp	53,000	Almora	
6	Commercial <i>chir</i> other than for timber purpose.	5,000 2,000	Almora. Naini Tal.	
		C. ft.		
7	Birch (<i>Betula Utilis</i>) ..	7,000 10,000 13,000	Almora. Garhwal. Tehri-Garhwal.	
		Tons		
8	Gypsum ..	1,808	Garhwal.	
9	Nal (<i>Phragmites Karke</i>)	500	Naini Tal.	
10	Ekra grass (<i>Erianthus ravanea</i>).	4,000	Do,	

Item no.	Raw material	Quantity available annually	Name of district	Remarks
1	2	3	4	5
		Tons		
11	Ulla grass (<i>Themeda Arundianacea</i>).	30,000	Naini Tal.	
12	Panni grass (<i>Vetiveria Zizanedes</i>).	50,000	Do.	
13	Spear grass (<i>Andropogan contortus</i>).	50,000	Do.	
14	Elephant grass (<i>Themeda Cymbaria</i>).	10,000	Do.	
		Mds.		
15	Chilka (Torch Wood for <i>chir-tar</i>).	2,000 5,000 4,000	Do. Almora. Garhwal.	
16	Resin	1,57,946 27,010 32,189 43,796	Almora Naini Tal Garhwal (Tehri)	Most of this quantity is being supplied to the I. T. & R. Co., Clutterbuckganj. Bareilly and a small percentage is supplied to Co-operative Societies and small industries in respective districts.
17	Lac	18,000	Mirzapur.	
18	Mororphal fibres (<i>Helectris Isora</i>).	1,000	Naini Tal.	

19. The forests provide utilities of a collective economic character. They exercise a profound influence on the climate and rainfall of the State.

20. One point which has to be emphasized is that almost all these forests are located in the hilly regions of the Sub-Himalayas and, therefore, are not easily accessible. In the future scheme of things, it would be necessary to open up these areas so that forest products can be brought down easily and quickly to any part of the State.

21. *Power*—The principal sources of power in the State are coal obtained from Jharia in Bihar and Ranigunge in West Bengal and electricity which is both thermal and hydel. The installed capacity for electricity in the State

as on 1st January, 1955, was 246,591 KW. of which 2,12,305 KW. was thermal and 34,286 hydel. In 1951, the latest year for which figures are available electricity generated was 620 million KWH. of which about 500 million KWH. was consumed. At present in the Ganga and Sharda Grid areas new power connections are being given up to 10 H.P. without any restriction. The Rihand Dam, which would ultimately cost about Rs.45 crores, would generate about 250,000 KW. and would open up opportunities for expansion. The development of hydro-electricity, on a large-scale, would open up the possibility of a new source of power which would help large-scale industrial production in the State. The present resources, however, are inadequate for the needs of the situation.

22. Besides, in the Second Five-Year Plan, the following power generating schemes have been included :

Scheme	Total cost (rupees in lakhs)	Expenditure in Second Plan (rupees in lakhs)	Benefits ('000 KW.)	
			On completion	In Second Plan
Yamuna Hydel Scheme ..	2,083	990	201	51
Western Uttar Pradesh ..	1,100	50	75	..
Harduaganj Extension (Steam Station) ..	300	300	30	30
Matatila Hydel Scheme ..	453	377	15	15
Kanpur Power Station Extension ..	186	186	15	15
Total	4,122	1,903	336	111

In the private sector, the following schemes are included in the Second Plan :

Name	Additional capacity KW.	Cost (rupees in lakhs)
Agra Electric Supply Co., Ltd. ..	4,000	25
Banaras Electric Light and Power Co., Ltd. ..	4,000	25
U. P. Electric Supply Co., Ltd. ..	4,000	25
Total	12,000	75

It would, thus be observed that when all the schemes are completed, the total availability of power in the State at the end of the Second Five-Year Plan would be 6,19,591 KW.

23. *Transport*—Finally a reference must be made to the availability of transport which influences the prosperity of the State. The route mileage for rail in U. P. is about 5,300 which means that only one mile of railway route for every 24 sq. miles of the territory.

24. There are about 11,430 miles of metalled roads, i.e. about one mile for every ten square miles of the territory. Efforts have been made to improve the situation but no tangible result has so far been achieved. This has had its effect on transport development. There were in 1954, 36,587 vehicles on the road of which trucks accounted for 5,288 and buses 2,681, others being cars, motor cycles, taxis, etc. The total number of trucks and buses was as follows :

Year	Buses			
	Trucks	Government Roadways	Private	Total
1952	5,896	1,120	2,703	3,823
1953	5,787	1,128	2,804	3,932
1954	5,288	1,212	1,469	2,681

The registration of buses and trucks has considerably fallen from year to year as will be seen from the following table :

Year	Buses	Trucks
1950	451	1,243
1951	506	1,100
1952	461	920
1953	271	662
1954	224	798

Thus, it would be observed that means of transport in the State are inadequate.

25. *Industrial Resources*—We now turn to an examination of the industrial resources of the State. The present position of factory industry in Uttar Pradesh will be observed from the fact that in 1954 there were only 1,572 licensed factories in the State as against 2,842 in West Bengal (excluding mining establishments and tea plantations), 8,027 in Bombay, and 6,369 in Madras.

If we exclude the factories employing less than 50 workers, the number of **relatively large factories** would be only about 319. On an average, industry gives employment to about two lakhs of people as against eight lakhs in Bombay, six lakhs in West Bengal, and three lakhs in Madras. If mining and plantation labour is added, in the case of Madras and West Bengal, the figures would be much higher. It may be observed that only a few industries account for the major portion of the labour population. For instance, the largest employment offering industry is textiles where about 63,248 persons are employed. Next comes food industry including sugar and oil which employ about 59,389 workers. Chemical industries offer employment to about 4,000 workers; non-metallic industries like glass offer employment to 11,000 and engineering to about another 11,000. Thus, about 68 per cent of the working population is engaged only in these five groups of industries. The following table gives the number of factories and the average number of persons employed under various groups of industries of the State in 1954 :

Serial no.	Industry	Number of factories	Average daily number of workers employed
1	A. Government Factories	127	29,695
	B. Other Factories—		
2	Process allied to agriculture	20	944
3	Food except beverages	395	59,389
4	Beverages	16	1,583
5	Tobacco	10	2,453
6	Textiles	87	63,248
7	Foot-wear, other wearing apparel and made up textile goods	26	3,372
8	Wood and cork except furniture	18	798
9	Furniture and fixtures	3	30
10	Paper and paper products	7	1,927
11	Printing and publishing and allied industries	159	5,153

Serial no.	Industry	Number of fac- tories	Average daily number of workers employed
12	Leather and leather products except foot-wear	30	2,724
13	Rubber and rubber products	1	140
14	Chemical and chemical products	53	4,260
15	Products of petroleum and coal .. ..	..	..
16	Non-metallic products except products of petroleum and coal ..	138	11,189
17	Basic metal industries	87	3,735
18	Manufacture of metal products except machinery and transport equipment	65	2,380
19	Manufacture of machinery except electrical machinery ..	130	4,694
20	Electrical machinery apparatus, appliances and supplies ..	3	45
21	Transport and transport equipment	54	1,703
22	Miscellaneous industries	118	4,174
23	Electricity, gas and steam	23	1,627
24	Water and Sanitary services	1	19
25	Recreation services .. ..	..	..
26	Personal services	1	12
Total ..		1,572	2,05,294

It would be observed that the industrial development so far achieved is inadequate to sustain the population on a comfortable standard of living.

26. More than half the factories in U. P. are small units. Their average daily employment is below 50. Evidently small units are the predominating feature.

27. With a view to assessing the regional development of industries, we are giving below the distribution of registered factories (under the Factories Act) in different districts of the State.

Number of factories and number of persons employed in Uttar Pradesh

Name of the district	1954 Number of registered factories	Number of persons employed
I. Meerut Division—		
1. Bulandshahr	16	505
2. Dehra Dun	36	2,287
3. Meerut	138	15,551
4. Muzaffarnagar	20	4,031
5. Saharanpur	38	9,032
II. Agra Division—		
1. Agra	227	12,601
2. Aligarh	65	5,757
3. Etah	3	479
4. Mainpuri	14	1,605
5. Mathura	22	731
III. Rohilkhand Division—		
1. Budaun	4	488
2. Bareilly	56	5,753
3. Bijnor	16	2,591
4. Moradabad	56	3,596
5. Pilibhit	5	2,092
6. Rampur	12	3,703
7. Shahjahanpur	17	998
IV. Kumaun Division—		
1. Almora	2	37
2. Garhwal Pauri	2	42
3. Naini Tal	14	719
4. Tehri-Garhwal .. .. .	..	..
V. Allahabad Division—		
1. Allahabad	93	5,564
2. Etawah	17	262
3. Farrukhabad	14	494
4. Fatchpur	2	58
5. Kanpur	274	67,618

Number of factories and number of persons employed in Uttar Pradesh-- (concl'd.)

Name of the district	1954 Number of registered factories	Number of persons employed
VI. Jhansi Division—		
1. Banda	4	37
2. Hamirpur	1	..
3. Jalaun	2	9
4. Jhansi	27	3,635
VII. Varanasi Division—		
1. Ballia	1	13
2. Varanasi	88	4,636
3. Ghazipur	1	588
4. Jaunpur	6	501
5. Mirzapur	18	1,277
VIII. Gorakhpur Division—		
1. Azamgarh	5	54
2. Basti	4	1,663
3. Deoria	16	9,844
4. Gorakhpur	35	11,328
IX. Lucknow Division—		
1. Hardoi	3	708
2. Kheri	11	1,616
3. Lucknow	109	14,910
4. Rae Bareilly	2	35
5. Sitapur	10	3,016
6. Unnao	6	627
X. Faizabad Division—		
1. Bahraich	20	963
2. Bara Banki	5	927
3. Faizabad	12	470
4. Gonda	21	1,773
5. Pratapgarh .. .. .	..	..
6. Sultanpur .. .. .	..	..
Total ..		2,05,294

28. From the table given above, it would be observed that Kanpur, Meerut, Lucknow, Agra, Gonda and Gorakhpur are important industrial centres of U. P. Besides these, Muzaffarnagar, Saharanpur, Aligarh, Bareilly, Rampur, Allahabad, Varanasi and Moradabad are some of the other important centres. Kanpur of all the centres, occupies the pride of place. In recent years useful industrial activity has developed around Meerut and Ghaziabad. Out of 51 districts in which the State is divided, there are no factories only in two of them, viz. Tehri-Garhwal and Pratapgarh.

29. *Economic Outlook*—The situation of economic resources of Uttar Pradesh has a great influence on its industrial development. Its natural resources and the skill of the people are important assets. U. P. requires a large number of products of heavy industries which can now be developed in the State itself. Generation of electricity, on a large-scale, should enable the establishment of a number of industries.

30. In respect of food supply the State is surplus. A number of raw materials is available, but the sources of these raw materials have not been fully exploited. With the full utilization of these raw materials, both existing and potential, a further development of industries could be envisaged. The future of the State is promising from several points of view. For strategic reasons, too, development of industries in U. P. would be a matter of great importance to the economy of the country as a whole.

31. *Conclusion*—From the foregoing, it would be seen that the State has a number of natural resources and, given certain facilities there are possibilities for their augmentation. The prosperity of the State depends upon the people and the natural resources. So far as the area is concerned, about 70 per cent of the total area belongs to the Gangetic Plain which is one of the most fertile regions of the country. Livestock population in U. P. is plentiful. The State has a fairly large forest area. It is poor in mineral resources but, in the scheme of things of to-day and considering the inter-dependence of one region upon another this deficiency should not matter much. Moreover, intensive and extensive survey of different mineral bearing areas is likely to yield fruitful results. New industries can be started on the basis of known resources. Existence of a large population and consequent expanding market in the State as well as in other States, justify the development of several industries. Modern technique of agricultural production has begun to be introduced in the State. This has already created a demand for a number of agricultural implements whose production could be fostered in the State. People have not so far made proper use of their environment and have not so far shown that spirit and

enterprise which are necessary for building up a modern industrial State. The population of the State is increasing and the fertile area is small in relation to the population. It is, therefore, essential to find alternative means of livelihood so that pressure on land is reduced and the only course which can be adopted is extensive industrialization of the State on a dispersal basis.



नमो भगवते वासुदेवाय

II. PRESENT POSITION OF LARGE-SCALE INDUSTRIES

32. From what has been stated in the preceding section about the natural resources, the occupational distribution of the population, and the stage of industrial development achieved in the State, it can be concluded that the growth of industry is un-balanced and there are serious gaps in the economic structure of the State. If the State is to attain a better balanced economic system and the general standard of living has to be raised, her large-scale industries already existing must be expanded along modern scientific lines and new industries established by exploiting various resources.

33. Before discussing in what directions and how to direct energies so as to attain fuller industrialization of the State, it is necessary to take stock of the present position and analyse the problems of the main groups of the existing industries in the State.

34. As pointed out earlier, Cotton textiles, Sugar, Oil, Glass and Glass-ware, Leather, Jute and Engineering industries are the main existing industries. Others are subsidiary and small. The main industries have remained in the vanguard for a considerable time in the industrial activities of the State.

35. *Cotton Textile Industry*—The cotton textile industry is one of the major industries of the State. There were 18 composite cotton textile mills, nine spinning mills and three weaving mills at the end of 1955 with a little over 8,00,000 spindles and more than 13,000 looms in the State.

36. The daily average number of workers employed in the cotton textile industry is about 63,000. The cotton textile mills manufacture coarse and medium varieties of cloth to cater to the needs of the middle and poorer sections of the population in this and the neighbouring States.

37. The latest figures available in regard to the capital employed is in respect of 1952 and the same are appended below :

					(Rupees in crores)
(a) Fixed capital	..	..	..	..	5.3
(b) Working capital	..	..	..	..	12.1
Total					17.4

38. The quantity of raw cotton and yarn consumed and yarn and cloth produced in 1955 is given below :

Consumption in mills		Production	
Cotton raw (million lb.)	Yarn (million lb.)	Yarn (million lb.)	Cotton cloth (million yds.)
109	69	97	294

39. The import and export figures of cotton twist and yarn and cotton piece-goods are given below. These are approximate figures as some movement might have taken place through trucks :

Import						Export			
Year		Cotton twist and yarn (mds.)	Cotton piece-goods in—			Cotton twist and yarn (mds.)	Cotton piece-goods in—		
			Bales		Boxes		Bales	Boxes	
1953-54	1,43,263	10,13,218	71	1,10,136	2,59,513	..	
1954-55	1,30,424	8,09,320	149	71,204	2,03,171	19	

40. These figures, however, would not give an exact idea regarding consumption of cloth in U. P. and, therefore, it is difficult to say precisely what the consumption of cloth is. The figures we are estimating are only approximate. Average all-India consumption varies between 15 to 16 yds. *per capita* which could be adopted for our purpose. On the basis of import and export of the State and assuming thousand yards to a bale, the total availability of cloth in U. P., in 1954-55 was 809 million yards imported plus 294 million yards produced inside the State. Out of this 203 million yards were exported. Thus about 900 million yards were available for consumption. Taking into consideration the export of cloth by road and some portion for stock, it may be concluded that the annual consumption would be about 800 million yards per year. This gives a consumption of 13 yds. *per capita* excluding handloom production in the State for internal consumption.

41. To-day the cotton mill industry in U. P. is in a languid state. About nine mills with a total spindlage of over one lakh and loomage of about 1,300 are closed. This has resulted in loss of employment and production. The Dikshit Sub-Committee which was appointed to examine the cases of the closed factories

has gone into the question of cotton mill industry and brought to light a number of difficulties which had retarded progress. The important factors which impede progress of the industry are given below :

- (a) High cost of electricity as compared to Ahmedabad, Bombay and Calcutta is one of the contributory factors which raises the cost of production.
- (b) The mills in Bombay work on 3, 4 or 6 loom-system whereas in Kanpur only 2 loom-system prevails in most of the mills. Besides the number of ancillary labour is also proportionately larger at Kanpur. Consequently wages are higher in terms of turn-over.
- (c) Imposition of frequent booking restrictions on movement of goods from manufacturing centres in U. P. to consuming centres and fixation of quota limitations by railways is another difficulty.

42. *Sugar Industry*—Sugar industry ranks as the leading industry of the State. In fact, this State has got as many as 67 factories employing about 59,000 workers out of the total of 136 factories in the country. Out of the total production of 15.9 lakh tons of sugar by the sugar mills in India during the season 1954-55, U. P. alone produced 9.03 lakh tons. Comparative growth of sugar factories in various States from 1947-48 to 1954-55 can be seen from the following table :

Year	Number of Cane Factories working in—									Total for India
	U. P.	Bihar	Punjab	Madras	Bombay	West Bengal and Assam	Orissa	Other States		
1947-48	63	29	1	11	10	2	1	17	134	
1948-49	65	29	1	10	10	1	1	17	134	
1949-50	66	30	1	11	14	1	2	14	139	
1950-51	67	29	1	12	15	1	1	12	138	
1951-52	66	27	1	12	15	1	1	16	139	
1952-53	66	27	1	12	14	1	1	12	134	
1953-54	65	28	1	11	13	1	1	14	134	
1954-55	67	27	1	11*	14	1	1	19	141	

*Figure for both Madras and Andhra.

43. Apart from 67 factories which are working in this State, four sugar mills and two refineries have been lying idle for a number of years. Three sugar factories have been transferred from this State to other parts of the country, while two of the 67 running mills have shifted from their previous locations to more favourable sites in the State itself. The 67 factories working in 1954-55 produced 9,03,411 tons of sugar as against 5,59,654 tons in 1953-54. Of this, 35 factories of Western U. P. produced 6,00,813 tons and 32 factories of Eastern U. P. 3,02,628 tons. In 1955-56 the production of sugar in U. P. is likely to be of the order of 9.75 lakh tons, 7 lakh tons being from Western U. P. factories and 2.75 lakh tons from Eastern U. P. factories.

44. The capital employed in the industry according to the Census of Manufactures (1952) is as under :

					Rs.
(1) Fixed capital .. .. .	..	..	..	..	9,02,40,428
(2) Working capital .. .. .	..	..	..	..	29,43,65,948
					<hr/>
				Total ..	38,46,06,376
					<hr/>

45. About 20 to 25 per cent of the production of sugar is consumed in the State itself. According to the bulletin issued by the Ministry of Food and Agriculture, Government of India, the best year was 1952-53 when the consumption in U. P. was 2.82 lakh tons. In 1953-54, it came down to 2.46 lakh tons and in 1954-55 it was 1.98 lakh tons. Considering the expected increase in sugar production, we can presume that the consumption in 1955-56 would be over 2 lakh tons. Consumption of sugar varies considerably from year to year. In some years, more *gur* is consumed than sugar and *vice versa*. However a tendency is being observed that, for the last two years or so, more and more sugar is being consumed in the country with the result that sugar consumption is expected to come to about 19 lakh tons this year which is the record figure so far achieved. It is further observed that sugar production has increased inspite of the fact that acreage under sugarcane cultivation has not proportionately gone up in U. P. This factor has to be kept in view for further expansion of the industry. It is considered that, in course of time, larger portion of sugarcane would be diverted for the production of sugar in the State.

46. Major proportion of production of sugar is exported to other States in the country. U. P.'s own imports from other places are negligible and the figure of 40,589 tons for 1954-55 apparently includes sugar that passed through

the State. The following are the figures of imports and exports during the last two years :

Year					Imports in tons	Exports in tons
1953-54	..	..	..	..	4,837	4,77,085
1954-55	..	..	..	..	40,589	2,67,351

47. The Planning Commission have suggested a production target of crystal sugar, at the end of the Second Five-Year Plan, of 2.3 million tons per year against the expected production of 1.85 million tons in the year 1955-56.

48. The Upadhyay Sub-Committee which was appointed to examine the hindrances which were standing in the way of progress has reported that the cost of sugarcane in relation to its sugar content is probably the highest in U. P. as compared to other States. In view of the fact that the Central Government has decided to issue licences for 53 new sugar factories out of which 80 to 90 per cent will be established in the South, we can reasonably foresee and realize that a serious threat to the existence of this industry of Uttar Pradesh is impending. Thus the removal of the handicaps that stand in the way of the industry has become an immediate necessity. Want of adequate supplies of sugarcane in eastern districts has resulted in short crushing season. Again, in this region, irrigation facilities are inadequate, consequently, the yield is low. Road transport situation in some of the areas is inadequate. In the neighbourhood of some of the factories, there are hardly any roads for the transport of either sugarcane or sugar. Thus these factories are unable to work economically. Taxation measures, financial handicaps and the like are the other difficulties which we shall discuss in a subsequent chapter of this Report. The recovery in U. P. as compared to other States is given below :

Average and minimum percentage of recovery of sugar in factories in India from 1947-48 to 1954-55

Year				U. P. Average	Bihar Average	Bombay Average	India Average	India Maximum
1947-48	..	..	..	9.80	10.49	11.05	9.85	11.93
1948-49	..	..	..	9.93	10.34	10.83	9.97	12.53
1949-50	..	..	..	9.64	9.91	11.84	9.89	13.10
1950-51	..	..	..	9.81	10.26	11.61	9.99	13.34
1951-52	..	..	..	9.27	10.32	11.08	9.57	N.A.
1952-53	..	..	..	9.75	10.03	11.51	9.96	12.70
1953-54	..	..	..	9.88	10.06	11.77	10.07	13.03
1954-55	..	..	..	9.66	10.23	11.67	9.93	12.68

49. The above factors have weakened the position of the industry and have assumed greater importance in view of the impending competition from the South.

50. *Distilleries*—This industry is subsidiary to sugar industry. There are 12 Power Alcohol producing distilleries and six Potable and Commercial Spirit distilleries in the State. One more Power Alcohol distillery will shortly start functioning at Mansurpur in Muzaffarnagar.

51. The production of power (absolute or de-hydrated) and industrial (rectified spirit) alcohol was as follows during the last 5 years :

Year					Power Alcohol	Industrial Alcohol
					(In thousand L. P. gallons)	
1951	..	..	..	..	82,81	27,31
1952	..	..	..	..	1,08,62	27,40
1953	..	..	..	..	1,13,49	23,63
1954	..	..	..	..	1,07,05	24,61
1955	..	..	..	..	1,24,38	33,38

52. Besides catering to the needs of the State, supplies of power alcohol were also made to various other States during 1954-55 as per details given below :

Name of State					L. P. gallons
Delhi	..	..	..	..	11,91,315.8
Punjab and Pepsu	..	..	..	..	14,94,651.1
Vindhya Pradesh	..	..	..	..	1,08,967.0

53. The daily average number of workers employed in the industry is about 1,750. The capital employed in the industry is as under :

					Rs.
(1) Fixed capital	..	..	..	..	97,58,173
(2) Working capital	..	..	..	..	69,69,806
Total					1,67,27,979

54. During 1955, six factories were granted licences under the Industries (Development and Regulation) Act, 1951, to effect substantial expansion of their undertakings.

55. Off-take of power alcohol has been slow. It is, therefore, necessary that consumption of power alcohol for industrial purposes should be investigated. If this is not done, it would be difficult for the distilleries to continue operation.

56. *Paper and Board*—There are two paper mills and four strawboard factories in the State. The paper mills are located at Saharanpur and Lucknow, while the strawboard factories are situated at Meerut, Saharanpur, Pilkhuwa (Meerut) and Pipraich (near Gorakhpur).

57. The production of paper and strawboard during the last five years is appended below :

Year						Production of paper in tons	Production of strawboard in tons
1952	..	..	..	..	..	5,944	8,974
1953	..	..	..	..	..	6,868	8,238
1954	..	..	..	..	..	6,939	9,207
1955	..	..	..	..	..	7,837	9,994

58. The average number of workers employed is about 1,900. The capital employed in the paper and board industry according to the Census of Manufactures (1952) is given below :

					Rs.
(1) Fixed capital	..	..	..	..	65,85,513
(2) Working capital	..	..	..	..	54,90,360
Total	..	..	..	..	1,20,75,873

59. The main problems of the strawboard industry are with regard to financial and transport difficulties.

60. *Oil Industry*—Next to sugar, oil industry is an important industry which is closely linked with the rural economy of the State since U. P. occupies a predominant position as an oilseeds producing State in India and contributes about 20 per cent of the total production of oilseeds in the country. The industry has mainly developed during the last 25 years or so. In 1924-25, there were about 69 oil mills (big and small) which increased to 139 registered (under the Factories Act) oil mills and about 800 small units (unregistered) in 1954. The bigger units of the oil crushing industry of the State are at present in a

crisis. A rapid survey of the closed oil mills of the important towns of the State reveals that about 75 oil mills are closed with a total crushing capacity of 2,53,000 tons of oilseeds per annum. About 2,700 Ghanis, and 150 Expellers and 11 hydraulic presses are lying idle. In these closed mills, the total capital locked would amount to Rs.82 lakhs comprising of Rs.46 lakhs in machinery and about Rs.36 lakhs in buildings.

61. The production of oilseeds in U. P. as mentioned earlier, is as under (1954-55) :

						Lakh tons
Rape and mustard	..	..	..	..	..	5.99
Linseed	..	..	..	..	..	1.43
Til ..	..	..	..	..	..	1.18
Groundnut	..	..	..	..	..	1.29
Cotton seed	..	..	..	..	..	.15
Castor seed	..	..	..	..	..	.02
						<hr/>
				Total	..	10.06
						<hr/>

62. The production of oil mills in 1954-55 was as under :

						Quantity (in tons)
Mustard oil	..	..	..	..	..	65,474
Linseed	..	..	..	..	..	14,384
Mahua	..	..	..	..	..	5,580
Castor ..	..	..	..	..	..	7,266
Til ..	..	..	..	..	..	2,696
Groundnut	..	..	..	..	..	10,844
Neem ..	..	..	..	..	..	492
Other oils	..	..	..	..	..	608
						<hr/>
				Total	..	1,07,344
						<hr/>

63. The U. P.'s import and export figures of oilseeds during 1954-55 are given below :

Oilseeds	Import (tons)	Export (tons)
Castor	405	600
Cotton	26,068	1,100
Groundnut	9,450	2,017
Linseed	4,493	10,088
Rape and mustard	19,059	66,576
Til	2,381	7,993

64. The import and export figures of vegetable oils during the year 1954-55 are given below :

Vegetable	Import (tons)	Export (tons)
(a) Castor	310	1,223
(b) Coconut	1,555	32
(c) Groundnut	17,162	792
(d) Others	4,887	22,274

65. The main problems of the industry are quality of oilseeds grown transport difficulties, and high cost of electricity. These have resulted in unremunerative crushing. Besides, sales-tax, ban on the manufacture of edible oil in the same premises in which non-edible oils are produced, difficulty in coal supply, lack of modernization of machinery and financial difficulties have created further problems for the industry.

66. Of the problems referred to above, sales-tax and quality of the raw material stand out as two of the most pressing problems which have led to the present bad state of the industry. We shall examine the question of sales-tax in greater detail later on. Competitors are taking the fullest advantage and the consumers prefer buying cheap oil from outside to taking it from the local mills. The inferior quality of oilseeds grown in the State will be apparent from the

following figures of oil content which has been supplied to the Committee by the U. P. Oil Millers' Association :

					Yield of oil %	
					Other States	U. P.
Groundnut	..	..	..	..	45 to 48	38 to 41
Mustard	..	..	..	..	43 to 46	35 to 40
Sesamum	..	..	..	..	37 to 40	36

67. The yield per acre of various oilseeds is given in the following table :

States	Sesamum	Rape and Mustard	Castor	Groundnut	Linseed
Bihar	293	455	272	..	268
Bombay	175	249	166	669	165
Madhya Pradesh	159	457	384	561	183
Punjab	195	388	..	694	224
Madras	261	..	204	911	..
Orissa	264	431	204	896	320
Uttar Pradesh	149	344	498	931	365
West Bengal	448	454	..	..	407
Assam .. ..	..	400	..	..	..

68. The U. P. oil industry is also seriously handicapped by transport difficulties particularly on the meter gauge of the N. E. Railway. There is a continued shortage of wagons on this railway and the difficulty is aggravated by the fact that U. P. Government has no hand in the matter of movement over old Assam Rail Link, with the result that the Assam and West Bengal markets cannot be supplied with U. P. Oil. On the other hand there does not seem to be any difficulty in the movement of oilseeds to other States with the result that the industry in U. P., has to face a very keen competition with that in West Bengal. The transport difficulty also affects the movement of coal to the industry. Thus the industry suffers both from internal factors like sales-tax, low quality of oilseeds as well as external factors over which it has no control. No wonder, therefore, that some units have closed down and others are just on the border line.

69. *Vanaspati*—There are five hydrogenated oil factories registered in U. P. producing about 35,000 tons of oil per annum against the installed capacity of 65,000 tons. One of the factories is closed at present due to some trouble in the management. The raw material for the manufacture of hydrogenated oil is generally groundnut oil a part of which is, at present, imported from other States.

70. The main difficulties facing the industry arise from the higher sales-tax on Vanaspati than in surrounding States, comparatively high cost of power, and higher cost of raw materials on account of low recovery of oil. If the groundnut cultivation is intensified and its quality improved, there would be sufficient seed which would provide work for the idle oil mills and also make the State self-sufficient in the supply of raw material for these Vanaspati mills.

71. *Glass Industry*—During 1955, there were 29 glass factories in U. P. of which 24 were working, employing, on an average, 4,730 workers. The capital invested is Rs.92 lakhs. The production of all these factories was about 25,000 tons which consists of lamp chimneys, tumblers, glass-sheets, bottles, electric bulbs and other hollow-ware.

72. In the sphere of bottle industry, the State has made remarkable progress. One firm has set up an automatic plant for the manufacture of bottles.

73. The import and export of glass during 1953-54 and 1954-55 was as under :

Year		Import	Export
		Tons	Tons
1953-54	.. .. .	2,673	14,877
1954-55	.. .. .	2,556	15,502

74. The greatest difficulty with which the industry is faced is that it is unable to receive coal in sufficient quantities regularly. It is very important for the glass factories to receive coal regularly because the large glass furnaces cannot be closed down without incurring a huge loss. On account of irregular and insufficient supply of coal, many factories are unable to work steadily and in full swing. Problems of the industry are occasional scarcity of some raw materials, lack of suitable managerial personnel and of "know how" of producing quality glass which demand serious attention.

75. *Tanning*—Leather tanning is an important industry of the State. It depends upon its raw materials on the domestic supplies of hides and skins, such as buffalo hides, cow hides, goat and sheep skins. Most of the raw hides

and skins obtained in the State were once exported out of U. P., but with the development of the tanning industry in the State, the export of raw hides has considerably gone down and that of tanned leather has correspondingly increased. The large-scale leather industry in U. P. is centred at Kanpur. Agra has a share but it is small. The industry in Kanpur draws its requirements of raw hides and skins chiefly from within the State itself and, to some extent from the neighbouring State. After the partition, the import of heavy types of hides from West Pakistan has totally stopped.

76. According to the Census of Manufactures (1952), there were 21 registered tanneries giving employment to 2,600 workers with a capital investment of Rs.1.28 crores. These tanneries produced leather worth Rs.1.82 crores. The types of leather manufactured are vegetable-tanned leather, chrome tanned, glace-kid, buff, imitation, crocodile, patent leather, fancy leather, etc.

77. The import and export figures of raw hides and skins and of tanned hides and skins and leather during 1953-54 and 1954-55 are appended below :

Articles	1953-54		1954-55	
	Import (tons)	Export (tons)	Import (tons)	Export (tons)
1. Hides raw	4,018	14,847	1,301	10,769
2. Skins raw	312	3,375	336	1,888
3. Hides and skins tanned and leather	1,208	1,602	1,385	1,785

78. The problems of the industry are non-availability of better quality raw hides, finance, shortage of bark, etc.

79. *Engineering and allied industries*—Engineering and allied industries in the State consist of a few rolling mills (four registered re-rolling units and 18 unregistered re-rollers) and a few general engineering workshops. There is also a non-ferrous metal industry developed in some western districts and Mirzapur. The general engineering factories manufacture a variety of products like agricultural implements, wood screws, hardware items, tube-well equipments, oil engines, oil expellers, hurricane lanterns etc.

80. According to the Census of Manufactures (1953), there were 16 registered factories employing about 1,630 workers. The total production amounted to Rs.92 lakhs.

81. The export and import figures of iron and steel materials including iron and steel bars, sheets, girders and others commercial forms of iron and steel are given below :

						(In tons)	
Year						Imports into U. P.	Exports out of U. P.
1948-49	..	..	..	..	..	1,74,724	62,454
1949-50	..	..	..	..	..	2,37,913	36,444
1950-51	..	..	..	..	..	2,05,805	64,144
1951-52	..	..	..	..	..	1,94,857	58,523
1952-53	..	..	..	..	..	1,90,632	50,661
1953-54	..	..	..	..	..	1,84,827	52,535
1954-55	..	..	..	..	..	1,99,522	33,688

82. The production of iron and steel in the State during the last six years is detailed below :

						(In tons)	
Year						Ingot and metal for casting	Finished steels
1950	..	..	..	..	..	7,918	21,595
1951	..	..	..	..	..	4,382	22,590
1952	..	..	..	..	..	7,778	21,321
1953	..	..	..	..	..	5,846	21,397
1954	..	..	..	..	..	8,446	28,333
1955	..	..	..	..	..	9,000	33,000
						Approximate	Approximate

83. The problems of the industry are inadequate supply of scrap and billets, high rates of electricity, transport and financial difficulties, etc.

84. *Miscellaneous*—Besides the industries which have been discussed separately in the foregoing paragraphs, a number of other industries have also been established in the State. Of these woollen industry is one of the oldest and biggest. At present there is one important woollen mill i.e. Kanpur Woollen Mills, Kanpur, besides a few other spinning units. According to the Census of Manufactures there were six registered factories employing 3,160

workers. The total production amounted to Rs.1.92 crores. The Kanpur Woollen Mills depend on imported wool for most of their requirements of wool and wool tops. The total production of yarn and cloth during 1954-55 was 22,69,000 lb. worth Rs.2.19 crores.

85. Jute is another important industry which has for long been established in the State. At present, there are three mills with 18,896 spindles and 800 looms employing about 6,650 workers. The industry has to import superior varieties of raw jute from Bihar, Bengal and Assam. However, with the improved methods of retting introduced, the quality of raw jute produced in the State is likely to improve. The State may become self-sufficient in this raw material in course of time. The annual production of jute manufacture was 19,819 tons and 18,671 tons in the years 1953-54 and 1954-55 respectively.

86. There is a large-scale match factory at Bareilly which produced match boxes worth Rs.1.10 crores in 1955. Bareilly has also got one Rosin and Turpentine factory which produced 6,705 tons of Rosin and 3,93,729 gallons (L. P.) of Turpentine in 1954. The Indian Wood Products Ltd., Izatnagar, Bareilly manufacture *katha* on a large scale. In 1954, this concern produced 523.38 tons of *katha* and 1,152 tons of *cutch* valued at Rs.27,19,600 and Rs.12,48,800 respectively. Messrs. Imperial Tobacco Co. of India Ltd., Saharanpur, have been manufacturing cigarettes, on a large scale, and giving employment to 2,100 workers. Besides, there is a Government Cement Factory at Churk, district Mirzapur, with a rated capacity of 700 tons (daily). Chemical Industry produces various kinds of chemicals like sulphuric acid, hydrochloric acid, sodium sulphite, etc. and, on average, employs about 2,000 workers. Brushware, paints and varnish, plywood and a few others have also developed. But these are small units. Attempts should be made to expand them.

87. *Conclusion*—From the description of the industrial progress in the State made so far, it would be observed that industrialization has only touched the surface. The analysis of the problems facing the various industries supports the view that many of these problems have to be properly tackled and solved, to ensure greater industrial progress. The State is deficient even in the matter of cotton textiles which is the primary necessity of the common man. Sugar industry which is linked with the rural economy of the State (annually sugarcane worth about Rs.36 crores is sold by the cultivators to the sugar mills) has also shown signs of stagnation. The leather working and tanning industries which were in the forefront in India have stagnated. The oil mill industry which has got the advantage of the raw material being available at hand is also in the process of decline. It is already working only to about 30 per cent of its capacity. Excepting a few rolling mills and an electric

lamp factory and a few other small-scale factories manufacturing such items as agricultural implements, expellers, etc. there is no engineering industry in the State.

88. The scarcity of capital, taxation measures, labour problems and power deficiencies stand out as problems of outstanding importance.

89. It is the view of the Committee that the pace of industrialization will be slow and halting unless Government actively stimulates industrial development and unless all classes of people willingly co-operate in schemes which may involve the introduction of better plant and processes and improvement in the efficiency all round.



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III. SOME BASIC FACTORS

90. From what has been stated in the preceding section about the present position of some of the existing industries in the State, it is evident that a better balance between agricultural and industrial economy for the State is called for. This would necessitate quickening the pace of industrialization, for which certain pre-requisites of industrial production are very necessary.

91. *Need for proper psychological atmosphere*—From the Industrial Policy Statement and the content of the Second Five-Year Plan, it would be observed that industrialization of the country has to be largely achieved through development by private enterprise except in a few cases where the State alone can start an industry. Although the State has assumed wide powers over the economic activities of the people, it is essential that the means through which industrialization has to be achieved are not forgotten. One of the most important pre-requisites for industrialization, therefore, is proper climate under which private enterprise would have the necessary incentive to work and make progress. The impression that the present policy of a mixed economy is a temporary phase should not gain ground. Proper development of the resources of the State would require the creation of an atmosphere in which the entrepreneur would be willing to risk his money, industrial pioneers would be free from uncertainties so as to direct their energies wholeheartedly to constructive purposes, and labour fortified by the recognition of its status, would contribute full quota of disciplined work to the common task of raising the State from its present position. Since proper climate for private enterprise has to be created, it would be desirable that undue and irrelevant criticism are not made against private enterprise without understanding the circumstances in which it functions. In our view, an atmosphere conducive to large-scale effort, initiative and trust is necessary for achieving the desired result of attracting entrepreneurs to start new industries in the State.

92. *Economic requirements for industrialization*—The pre-requisites which are necessary to found and establish an industry are men, money, material and markets. A happy combination of all these factors is the best. But even three of them can quicken the pace of industrialization. The first two, i.e. men and money are, however, absolutely essential.

93. *Markets*—All commodities, as distinct from services, have two places of attachment, (i) a place of consumption of finished commodities, and (ii) a place of origin of raw materials. The first relates to markets and second to the availability of raw materials. But in both these cases it is the transport

which plays the important part. Therefore, the place of consumption, i.e. the market becomes important if it is more expensive to transport the finished products than the raw materials. If markets are not locally available they can be found elsewhere. Of course markets for heavy freight-bearing industries should be locally available as far as possible. Even here if the manufactured product is an article of high value, freight considerations may be immaterial, for in that case the article would be able to absorb the freight easily in the value and to compete in other markets. England, for instance, has built up a vast industrial structure on the basis of overseas markets. Similar is the position with regard to some of the other countries on the Continent. Even in India all the industrialized States do not consume their production inside the country. In a vast country like India, therefore, it is not necessary that markets should be available in every region except in case of specialized markets where the cost of transport plays an important part.

94. *Raw materials*—Another important pre-requisite for industrial development is the availability of raw materials. As would be observed from a study of industrial development in countries like England, Germany, Belgium and Japan it is not necessary that all types of raw materials should be available in each region. In most of these countries, there are no raw materials available, except a few. Yet all the countries have developed a number of industries for which raw materials are imported from other places or they have to depend for markets elsewhere and in some cases it may be both. The main reason for their advancement is that the people are enterprising and industrious and have the backing of large financial resources.

95. *Raw materials* again relate to the cost of transportation. The basic answer to the problem of development of industries nearer the source of market or the raw material is provided by the type of materials used in each industry and the nature of their transformation during the process of their production. From this point of view, an industry like iron and steel and such other which are largely dependent upon supplies of mineral resources, should be developed nearer the source of supply of raw materials unless strategic reasons are found important. But in case of industries like cotton textiles and a number of engineering industries where the raw materials enter the final product as they are, it is the market which becomes important. These industries can be developed anywhere, examples of which we have given above.

96. *Money*—Money includes capital and financial facilities. For successful industrialization, adequate capital resources are needed. Difficulty in obtaining sufficient capital for investment in industry retards development. It is, therefore, necessary that adequate capital is available if industrialization has to succeed. In the manufacturing industry, period of waiting for profits is generally long and uncertain. If the venture gives a reasonably quick return and the profitability is proved, capital begins to flow without much effort. Moreover, in order to nurse capital, conditions for industrial finance must be

scientifically organized. The smallness of capital resources and the competition for them from different quarters, prevent any large flow of capital into industry. It is, therefore, necessary that flow of capital is helped as much as possible.

97. *Men*—Men must be taken to include industrial leaders, technical, managerial and scientific experts, skilled and manual workers. Industry makes demand for ability entirely different from that required in primary production. Even in case of manual workers, trained hands suitable for industrial production are necessary. Supply of skilled workers willing to take up industrial occupation is another important factor necessary for successful industrialization. In industries like metallurgical, engineering, and chemical in which development is most urgent, high degree of skill and intelligence is necessary on the part of the operatives. Unless the supply of trained personnel is adequate and men are efficient, the cost of modern industry would remain high. We are planning for social welfare and prosperity which has thrown greater responsibility on the workers. Our efforts are likely to be hindered if labour discipline were at a low ebb. Labour has not only to contribute a full day's disciplined work to the task of national planning but also has to be fired with a high sense of patriotism so that petty prejudices and personal inconveniences are subordinated in the larger interest of the nation. Labour has to maintain strict discipline and give up all activities like go-slow and strikes, for these are bound to affect ultimately their own interest. They should be actuated by a keen sense of duty and consciousness that they are contributing to national welfare. They are an intelligent class and they should be proud of the fact that they are next to none in efficiency and in their contribution towards building up a Welfare State.

98. *The Entrepreneur*—Supreme need, however, is for industrial pioneers and entrepreneurs. Even if other factors like materials, markets and labour supply are assured, industrialization cannot make much headway unless industrial leaders are available to combine these factors of production to initiate and establish industry. It is the entrepreneur who takes the risk of untrodden fields and brings the men and the materials together and organizes industries. If the State offers facilities and co-operation it should not be difficult to get proper men. What, however, has to be emphasized is that favourable conditions should be created in the State so that people may be enthused and finance may be forthcoming for industrial development.

99. Men of enterprise, energy and initiative form the backbone of industrial society. They co-ordinate all the economic factors both to secure the internal development as well as to capture foreign markets. In order that the private sector on which so much responsibility has been placed under

the Plan plays an important role in building up the economy of the State, it is essential that industrialists look ahead of times and act with foresight. They will have to remove the erroneous impression in the country that they look more for profits than for social justice. By allowing increasing facilities to labour whose contribution to industry is of no less importance, the industrialists will not only earn the goodwill of labour but would also create public confidence and respect. It would also give them greater strength to successfully operate in a socialistic pattern of society.

100. In this great task, Government has to play an equally important role. It has to mete out justice and fairness to both management and labour in the matter of administration of various laws which affect the industry. It should show sympathy and understanding in all matters so that industrial peace is assured and an atmosphere of co-operation and goodwill fostered.

101. According to the Industrial Policy Resolution recently issued by the Government of India, some basic industries have been declared for being developed by the State, but rest of them have been left to private enterprise. The decision of the Government is not based on any doctrinaire principles but it is as it should be, for we are planning a Welfare State within the frame-work of democracy, which connotes, among other things, freedom of enterprise. The task of planning for Welfare State, in an under-developed country like India, is a heavy one and Government realizes that without the willing co-operation of all sections of the community much progress cannot be made. Above all, the work of industrial pioneers and entrepreneurs will be the main pivot around which other activities will grow.



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IV. DEFICIENCIES AND SUGGESTIONS FOR IMPROVEMENT

102. In the preceding section, the pre-requisites of industrialization have been stated. We shall now examine the position of their availability in U. P. and find out the deficiencies which retard development and the measures which would improve the situation.

103. *Raw Material Resources*—So far as raw material resources are concerned, U. P. is reasonably supplied with agricultural and forest resources. Wheat, rice, maize, oilseeds, sugarcane, hemp, tobacco and some quantities of jute, wool and cotton are available. The cotton textile industry has lost the advantage that it enjoyed in the matter of supply of cotton as in the pre-war days 50 per cent of it came from within the State. During the war and in the immediate post-war period on account of the shift of emphasis from cotton growing to food production the area under cotton which was 6 lac acres dwindled to less than a lakh acres. Apart from this, a large number of ginning factories have been rendered inoperative resulting in loss of gainful employment. The Government should give a lead as in Punjab by encouraging cultivators to grow more cotton consistent with our food requirement. On the two agricultural resources, i.e. sugarcane and oilseeds, two important industries are already established. With the development of more industries the financial condition of the agriculturist can be placed at a still higher level, if adequate opportunities are given for the fuller exploitation of the various crops grown all over the State. Just as sugar industry has benefited the agricultural classes, similarly the development of new industries based upon other agricultural products would help them in raising their standard of living and add to their welfare. Therefore, any hindrances in the way of such development should be removed, otherwise not only the industry and the agriculturist would suffer, but the finances of the Government would also be affected. The livestock population in the State is considerable and further improvement in their breed is taking place through State action and otherwise. So far as forest wealth is concerned, there are some belts with good quality commercial timber, bamboos, and grass etc. some portion of which has remained untouched and unexploited, so far, for lack of suitable means of transport. They are inaccessible and lie far into the interior. Thus the heavy cost of transport makes their exploitation difficult and uneconomical.

104. Similarly, there are mineral deposits specially in the Himalayan region and the southern portion of the State close to the East Vindhyas. Limestone, glass sand and kankar, are already being commercially exploited. Deposits of coal, copper, gypsum, soap-stone and a number of other minerals are said to exist in the State. But they are all lying unsurveyed and unexplored so far. It is necessary for the State Government to have them surveyed quickly in order that the mineral wealth of the State can be utilized.

105. Two important raw materials required for engineering industries are pig iron and steel. The recent change in their price fixation policy resulting in uniformity of their prices throughout India, at every rail-head, is welcome. Thus, pig iron and steel are equally easily available at the same price in U. P. as elsewhere.

106. Moreover, U. P. is a State which is surrounded by raw material producing areas like Bihar, Vindhya Pradesh, Madhya Pradesh, Punjab and Rajasthan. Therefore, even if some of the raw materials are not locally available, they can be procured from the neighbouring States provided the freight on them is not uneconomic.

107. *Markets*—The large population of the State provides a big market for industrial products. The Second Five-Year Plan has opened up opportunities for new development and would create demand for producer goods industries as well. The electrification schemes of the State will require electric motors, transformers, switchgear equipment and cables, and wires on a large scale. Rapid industrialization as desired, would, by itself, provide an expanding market. Further, the central situation of the State provides great facilities for catering to the demand from other areas.

108. *Requirement of Finance*—Finance is required for expansion of existing industries and for the establishment of new ones. The quantity of capital available in the State for industrial purposes cannot be easily ascertained as even in highly advanced countries where banking habits and facilities have been widely developed, such calculations are more or less in the nature of guess work. In Uttar Pradesh where until recently Zamindari prevailed on a large scale, the margin of error in such estimates is still widened. The development of joint stock organization which is capable of raising capital on a large scale has been slow in the State. At the end of 1955 although there were 1,746 companies, their total paid-up capital amounted only to Rs.36.94 crores. On account of heavy taxation measures and other factors, raising of fresh capital whether by borrowings or fresh issues has become difficult. These factors have also dried up internal resources because on account of high taxes creation of any large reserves has become out of question. These are factors which are common to the country as a whole. In U. P. however, one unfortunate fact is that industrial progress has been slower than elsewhere which has further added to the difficulties of the situation.

109. The problem of finding adequate capital for the development of industries has thus become difficult. In spite of these difficulties we have tried to consider ways and means whereby necessary capital could be available. The rise of prices of agricultural produce in recent times has brought about a growth of savings in the rural areas. If these savings could be voluntarily mobilized,

a part of the capital required could thus become available. Similarly a large number of ex-zamindars and taluqdars, apart from their past savings, have been or would be receiving compensation from the Government. These could be diverted for investment in industries. The industrialists and businessmen of the State would also be contributing their share to the over-all development from their resources. Besides, a part of the capital can be obtained from outside provided the Government of the State create suitable conditions which would attract entrepreneurs to the State. These and similar other methods have been discussed in detail in a subsequent Chapter of this Report. Taking everything into consideration, we have reasons to believe that adequate financial resources would be available for the development we have envisaged.

110. *Industrial Training*—For several years past, a large surplus labour force of U. P. has been seeking employment in distant areas like Assam, West Bengal, and Bombay. Besides, a large labour force is available in almost every part of the State. Since industries in the future will have to be dispersed, the problem of dearth would not be there. But in the districts, agricultural labour will have to be trained for factory work and will have to be adjusted to factory life. Proper arrangement for imparting training for fitters, mechanics and the like should be made so that skilled labour is available to industry. This underlines the importance of vigilance by Government so that industrialization in the State is not hindered for lack of suitable personnel.

111. *Industrial Leadership*—Finally we come to a discussion of the problem of industrial leadership. Availability of men and money has greatly helped in industrializing other States which are relatively in a more disadvantageous position so far as supply of raw materials and availability of markets are concerned. There is no reason why U. P. should lag behind in this respect. In the industrial regeneration which came in the wake of Independence, U. P. has hardly any place of importance. Unfortunately a number of industries, until recently were controlled by foreign interests who were great pioneers in their time but since Independence, it is regrettable, they are selling out their interests and leaving the country and so are unable to help in the industrial progress of the State. These factors, in part, were also responsible for slow progress in the State. However, with proper encouragement it should be possible to encourage Indian industrialists to start new industries. With proper effort it should not be difficult to get enterprising men to start new industries in the State.

112. *Power Development*—In addition to the basic factors examined above, there are a few more important considerations which greatly influence industrialization. Availability of adequate motive power is one of them. In Chapter I we have indicated the availability of power in the State. Power

development in U. P. is not commensurate with existing and future needs ; at places the supply of electricity is intermittent and occasional breakdowns hamper production. We are informed that, at present, connections up to only 10 H.P. in Sarda and Ganga grid areas are being given which is absolutely inadequate for any large-scale industry for which almost 1,000 KW. may be necessary. Thus the present availability of power is inadequate. The major portion of the generating capacity is owned and operated by the State. It is, therefore, their responsibility to see that adequate power supply is made available. In addition to the demand for power from the existing and new industries which we have envisaged for development, every district should be provided with 5,000 KW. spare capacity to absorb more industries in future. There are fifty-one districts in the State, and, at the above rate, a total of 255,000 KW. spare capacity alone is needed. This figure may appear high at the first sight but once different industries are started, the need for power would grow and we apprehend that even this estimate may not prove to be sufficient for the demand. Serious complaints from a number of quarters were voiced before us about the breakdowns in the supply of electricity. We strongly recommend that service stations must act promptly like the Fire Brigade and restore connections without loss of time if the current fails.

113. We are of the opinion that the plans of the State Government which are likely to be completed in the immediate future cannot cope with the demand for power which would be generated by schemes of industrial development recommended in a subsequent Chapter of this Report. We, therefore, suggest that an autonomous Electricity Board should be created under the law for the development of electricity power, whether thermal or hydel, its distribution, and other connected matters. The Board would decide the size of the project and the nature of development i.e., whether hydel or thermal power would be more advisable. Substantial representation on such a Board should come from businessmen and industrialists of experience. Once a plan, keeping in view the needs of each region and its urgency is drawn up, the Board would be in a position to do the task efficiently. Power should be made available at reasonable price at the earliest possible date. We have discussed the question of reasonable rate elsewhere in this Report.

114. Elsewhere in this Report we have indicated the cost of schemes for power generation in the State. A disconcerting feature which we observe from these facts and figures is that expenditure on Government schemes is very high. On the private schemes, the average expenditure comes to about Rs.625 per KW. As against this, on Government schemes in case of hydro-electricity, the average comes to about Rs.1,500. Even in case of the Kanpur Station extension scheme which is a thermal plant, the average expenditure

comes to Rs.1,240 per KW. which is almost double of that of private schemes. If our suggestion for an autonomous Electricity Board is accepted, the State Government might make substantial savings on this account as a result of economies effected. The State plans to invest Rs.19.03 crores during the Second Plan, besides the Rihand project, on five other schemes of power generation. Even if the cost does not come down to Rs.625 per KW. of the installed capacity as in the case of the thermal plant, we are of the opinion that there is considerable scope for economy.

115. *Transport*—Transport is another important factor which has a direct bearing on industrialization. An efficient and well-developed system of transport and communications is vital to the success of industrial development in the State. It plays an essential role in determining both the cost of production and the selling rate of the finished products. It also affects the economy in several other ways. There are three forms of transport, (i) road, (ii) rail and (iii) water.

116. In so far as rail transport is concerned, we have indicated earlier, that the State is not at a disadvantage as compared to other States. However, the southern regions which are rich in mineral deposits are not well served by railways. At present there is only one rail link *via* Manikpur to the Vindhya region. We have indicated earlier, in this Report, that immediate survey should be made of the southern regions of the State for mineral deposits in the area. This would make a large demand on transport. Besides, some of the minerals which are not found in the State could be drawn from Vindhya Pradesh and Madhya Pradesh. Owing to circuitous route, at present, the freight is very high. It is, therefore, necessary that direct link with these areas should also be established. We, therefore, recommend that this region should be opened up by railways at three or four places at every 100 miles or so, so that all these areas become easily accessible. We also recommend that the Rihand Dam area should be directly linked to Katni area which is full of mineral deposits. If this is done, the distance of Madhya Pradesh coalfields could be reduced.

117. In Chapter II, we have shown how the oil industry of the State is handicapped on account of rail transport difficulties, as U. P. Government had no hand in the movement over the Assam Rail Link. We, therefore, recommend that the State Government should have a representative on the Wagon Allotment Committee over this railway. In so far as movement of coal is concerned, we recommend that the State Government should impress upon the Central Government the need for a liberal supply of coal wagons for the State. This would not only help the oil mill industry but a number of other industries of the State as well. Similarly, adequate supply of covered wagons for

despatch of sugar from the sugar zones of the State is necessary to avoid unduly large carryover of sugar stocks.

118. The Upadhyay Sub-Committee also went into the question of freight rates in respect of sugar. Prior to 1948 there were special freight rates for the movement of sugar to ports. This system requires to be re-introduced as it would help in meeting the competition from the South. It was reported that the average increase in freight as compared to pre-war freight rates has been only about 90 per cent. On sugarcane, however, the increase has been about 500/600 per cent. Even making allowance for the low freights prevailing before the war, the increase is abnormal and requires to be adjusted at an equitable level. This is particularly necessary in U. P. for factories purchase cane mainly from small growers and the factory farm cane forms a very minor part of the total cane crushed by the factories. The lowering of the freight to an equitable level will afford a much needed assistance to the sugar industry. Similarly freight rates on cotton and cotton piece goods should be so adjusted that the industry is able to progress.

119. While progress is being made in respect of railway development, these plans are not likely to be equal to the task which they would be called upon to perform during the next five years. Therefore, more reliance will have to be placed on road transport. The State is not at a disadvantage in respect of development of roads in comparison with other States. However, high level of taxation on motor transport, restrictions placed on inter-State services and on long haulages, and the policy followed in granting permits for only short periods have greatly hindered road transport development. As is well-known, both U. P. and Bihar are suffering from difficulties in the matter of movement of their produce. If inter-State traffic is developed between U. P. and Bihar and Delhi and Punjab, it would not only help in the movement of traffic, but would also reduce the burden on railways. The development of road transport, further, would provide employment to a large number of people and give fillip to the establishment of many new industries like repair workshops, petrol stations, body building, etc. Thus, industrialization would be greatly aided. We, therefore, recommend that road permits should be freely issued and inter-regional and inter-State traffic encouraged. For this purpose, the terms on which permits are granted to private operators should be liberalized and high taxation avoided. This would not only help U. P. but also other regions which would be connected to it. The transport difficulties will increase with further industrialization of the State and action on this matter is urgently called for.

120. As we have pointed out earlier, the hill regions of the State are at present inaccessible with the result that the forest and other resources cannot

be exploited. We, therefore, recommend that these regions should be opened up by roads both vertically and horizontally in order to make the forest areas easily accessible and with a view to developing tourist traffic for which more hotels and rest-houses at every 50 miles should be opened. We have examined the plans of the Government for development of roads in that area. They appear to be satisfactory but must be expedited. For transport of goods in these areas, construction of aerial ropeways may be considered.

121. Likewise, the rural areas where Sugar Mills are situated should be provided with metalled roads. This would not only help the industry, but also the agriculturist as he would be able to reach his crop to the mills more easily and quickly. Further, the regional plan of development which we recommend subsequently in this Report would be possible only if selected sites are provided with good roads and other means of communications are properly developed.

122. While we do not have adequate data in our possession in regard to the present position of the water transport system, if any, in the State, we find that almost the entire State leaving the hilly areas in the north, has many rivers. The Ghogra, the Ganga and the Yamuna with a large number of tributaries flow over the Gangetic Plain. Ganga and Yamuna have been used for transport of goods for a number of years, but on account of rail and road developments and silting of the river-beds, they have been neglected. We are of opinion that proper dredging of rivers should be carried out which would keep them navigable throughout the year. A properly developed river transport system would cheapen the cost of transport and would be a useful adjunct to other forms of transport. It would connect the entire State right from Ballia in the east to Delhi and Hardwar in the west, which would greatly help industrial growth. River navigation, by itself, would become an important industry. Thus it would be observed that the development of river transport would not only improve the transport situation in the State, but would also simultaneously develop another industry. We are of opinion that there should be at least one service a day on each route. The aim should be to have the rivers navigable in such a manner that barges up to 500 tons which do not require much of a draught should be able to ply. This would also offer scope for employment on a large scale.

123. For the last few years, industrial housing has been a problem U. P., except Kanpur, is relatively free from those handicaps which result from congestion in highly industrialized centres and the Government can take this opportunity for good town planning in areas where industries can be started. Government should provide workers' quarters at reasonable rents which would

be an attraction for industrialists to start new industries in this State. Government should make it clear that in case of every new industry, they would provide adequate housing. This should not be difficult when Government of India are prepared to help in such schemes.

124. *Long-term Leases for Forest Exploitation*—Elsewhere in this Report, we have recommended the opening up of the forest areas of the State so that the various forest products could be exploited and industries dependent upon them established in the State. Development work connected with exploitation of various products would entail the grant of long-term leases. We, therefore, recommend that leases for forest areas should be granted for long terms. Government of India are going to establish some demonstration timber treating and seasoning plants with a view to upgrading the secondary timbers and utilizing them fully. We suggest that the State Government should try to get one of the plants established in U. P.

125. *Problems of Water-supply and Effluent Discharge*—Large-scale development of chemical industry and some heavy engineering industries which we have envisaged in this Report would create problems of water-supply and factory effluent discharge. The requirements of water can be met from one of the following sources :

- (i) State-owned canals, and
- (ii) direct pumping from rivers or tube-wells constructed in the factory premises.

126: Canal water would not be sufficient as the canals do not flow regularly and for one month they are closed for repairs. Direct pumping from rivers is the only possible source provided sufficient minimum discharge is available. But it is permissible only after irrigation requirements have been met. For this purpose sufficient water-flow in the rivers is essential. This entails proper dredging of rivers. In some places dams may have to be constructed in order to ensure regular flow. We recommend that suitable locations should be developed as suggested above and industrialists should be acquainted with availability of such locations for the development of chemical and heavy engineering industries.

127. The disposal of factory effluents can be made in one of the following ways—

- (i) by discharging in State-owned canals,
- (ii) in drains,
- (iii) in rivers, and
- (iv) in fallow lands.

Discharging into canals, except in special cases, is not permitted and wherever

it is permitted, it is on the condition that effluent is purified and disinfected. Similarly, State drains can also not be used. Properly treated effluent can be discharged in bigger rivers with sufficient discharge where effluent gets diluted thoroughly. It is possible that water may get polluted in this way and there might be unnecessary discontent among the public. Moreover, since the same water may be used by other factories elsewhere, it is necessary that the effluent is discharged into rivers after it has been properly treated and no objection is allowed to be raised to its discharge. We, therefore, recommend that Government should enact a suitable legislation for the purpose.

128. We are of opinion that industrialists in U. P., require assistance in complying with the formalities to be gone through in obtaining licences and generally in following up those applications in the Ministry of Commerce and Industry. We, therefore, recommend that the Directorate of Industries should have a separate section which would help in the preparation of applications for licences required under the Industries (Development and Regulation) Act and render all possible assistance in getting these licences.

129. *Conclusion*—The suggestions we have made are aimed at creating the necessary facilities which would aid industrialization. We are, however, conscious of the fact that large-scale industrialization is not possible unless the purchasing power of the masses is improved. So long as purchasing power is low, the demand for industrial products would not be large and this would be a factor against high level production. High purchasing power would lead to increased consumption, production and increased employment. An increase in expenditure upon projects like roads, housing, town improvement, water-supply, social services, etc., would, in the end, prove extremely productive. Large-scale Government expenditure would give purchasing power to the masses which, in turn, would stimulate further industrialization.

V. HINDRANCES EXAMINED

130. In the preceding Chapter we have examined the deficiencies in the economic system and made certain suggestions in order to improve the situation. Besides those factors, there are a number of hindrances which stand in the way of development and progress. We had appointed a special Sub-Committee under the Chairmanship of Sri M. D. Upadhyay, M. P., to study these difficulties and hindrances in the way of industrialization. Another Sub-Committee which we had appointed under the Chairmanship of Sri G. N. Dikshit, M. L. A., to study the problems relating to the opening of closed mills has also brought to light a number of difficulties with which the industries are faced in the State. These hindrances and difficulties we shall examine in this section. These factors broadly fall within the purview of taxation measures, and labour policy.

131. *Tax Burdens*—One of the main hindrances has been high level and method of taxation. The State at present is levying a multiple-point sales-tax, taxes on motors vehicles and motor spirit, electricity duty, sugarcane cess, excise duty and a few others. Besides, local taxes like octroi, terminal taxes and tolls are also levied.

132. It is necessary for the Government to rationalize its tax structure and simplify its administration. Taxes should be levied in such a way that adverse effects on trade and industries are avoided. What is important to remember is that, if the level of taxation is higher in U. P. than elsewhere, new industries cannot be established here and the existing ones would not progress. Further, the industries of the State will have to face uneven competition with the industries of other States and this may lead to a movement of the industries to other States. In order to obviate such possibilities and to maintain the confidence of the industry, the State should ensure that conditions obtaining in the State are as favourable as elsewhere if not better. Although in the Second Five-Year Plan, the Central Government have envisaged the raising of a part of the finance through higher taxation, the State should try to keep taxation within limits. It must be realized that with improved production, even the present level of taxation would give higher yield. It would be wrong to increase tax burdens before the *per capita* income has increased, as such taxes would seriously affect purchasing power which, in turn, would hinder industrial development. When the *per capita* income is so low, it would also create difficulties and unnecessary discontent. Consequently even raising of necessary loans might be in jeopardy and, we apprehend industrialization as desired by Government may not be achieved.

133. *Sales-tax*—One of the taxation measures of the State Government which has created discontent is the sales-tax. The system obtaining in the State is a composite one under which, there is a single-point tax at the source, on a number of commodities and a multiple-point tax on others. The tax is levied not only on the sale of finished products but also on essential raw materials. The sales-tax rates in U. P. are so high that they are causing a shift of the trade and business to the neighbouring States which have comparatively lower sales-tax rates, mostly in the border districts. For example, the oil consuming industries prefer to buy oil from other States even by incurring a small freight instead of buying from local oil mills and paying an extra sales-tax of about Rs.2 per maund. Similar is the position in regard to other industries which consume semi-finished materials. On account of the multiple-point tax system the same article is subject to tax twice. Double taxation adds to the selling price which ultimately becomes uncompetitive.

134. The Sales-Tax Commissioner, after stressing the consideration of the tax burden, stated that two other considerations are very relevant, and the question cannot but be viewed in their background. One is financial requirements of the State, and the other is the convenience of the administrative machinery to collect the tax. Any system which gives relief to industry and trade but leads to evasion of tax cannot safely be adopted. We have carefully examined all the points raised by the Commissioner and we are of opinion that revenue consideration though important in itself cannot be the sole guide for taxation. We have indicated earlier the depressing effects of the present policy. When the purchasing power of the people is low, high sales-tax would be harmful and unpopular. In Uttar Pradesh, we find that due to pressure from the Central Government, efforts have been made to collect as much revenue as possible from taxation from all possible sources. But a high tax rate and low purchasing power do not go well together. Personal income levels of the masses in Uttar Pradesh are low and, therefore, the State cannot afford to tax its people on the lines of other industrialized States in the country. The State Government has to consider whether it should lay greater emphasis on immediate considerations of revenue than on the needs of expanding the industries, increasing the scope for employment and thereby enhancing the purchasing power of the people. The latter would undoubtedly yield lasting benefits, not in the too distant a future, to the people as well as to Government revenues.

135. We have already indicated that a higher sales-tax rate in U. P. than elsewhere should not be adopted if her industries and trade have to prosper. The two-point tax would be highly irksome. Once the need for a low tax at par with other States and the simplicity of administration are recognized, the balance is in favour of a single-point tax at a reasonable rate.

136. We were informed that the Government were already seized of the problem and that they had appointed a special Committee to examine the sales-tax policy. We are not aware of the detailed recommendations of that Committee nor of the attitude of the Government to these recommendations. We, however, recommend that a single-point sales-tax on the last stage of sale should be levied. All industrial raw materials and ancillary industrial products which enter into the manufacture of a finished article should be exempted from this levy. The total incidence of tax on an article should, in no case, be higher than the tax levied on a similar article in surrounding States.

137. The Sales-tax legislation also requires simplification in order to improve Sales-tax administration. We, therefore, recommend that the present legislation on the subject should be amended and, as far as possible, brought in line with the existing legislation in West Bengal.

138. *Cane Cess*—Sugar Industry is one which after the grant of protection in 1932 had got well-established in the State within two years but now the industry has undergone a change. Other States are coming up in competition. This situation is disturbing and needs an enquiry into its causes. Sugarcane price policy, high taxation, low recovery, congestion of factories in certain areas, lack of facilities for transport and irrigation, low yield of sugarcane, high bonuses to labour, etc. have all combined to put a check on the progress of the industry. While high sugarcane price gives purchasing power to the agriculturists, high taxation retards progress of the industry.

139. The U. P. Government is levying a cess on sugarcane at the rate of three annas per maund. The proceeds from the cess are credited to general revenues. The cess has been imposed for a very long time but apparently no action seems to have been taken to utilize it properly. Besides, a commission at the rate of nine pies per maund of sugarcane is also being charged. The following statement gives the rates of the cess as being levied in different States in the country :

States	Rate of cess per maund of cane			Recovery % in the season 1954-55	Amount of cane cess per maund of sugar
	Rs.	a.	p.	Per cent	Rs. a. p.
Uttar Pradesh	0	3	0	9.66	1 15 1
Bihar	0	3	0	10.22	1 13 4
Madras	0	0	7	9.21	0 6 4
Punjab	0	2	0	9.18	1 5 9
Mysore	0	3	6.3	9.68	2 4 4
Bombay	0	2	11.3	11.67	1 9 2
Hyderabad	0	1	2.1	10.99	0 10 8

From these figures it would be observed that the cess is the highest in U. P. outside Mysore where production of sugar is not of much consequence. Besides the above, low recovery and high freight charges have thrown a great burden on the industry. The crushing season is also long in the South which reduces the cost of production. The total disadvantage for a U. P. factory, thus, amounts to over Rs.6 per maund of sugar as compared to Bombay factories.

140. The Tariff Commission in 1950, held that the levy of a tax on a raw material is, as a rule, wrong in principle and it is particularly objectionable when imposed on the raw material of an industry like sugar with which consumers all over the country are concerned. The Commission, therefore, recommended that all the Provincial (now State) Governments should either spend the major part of proceeds of the cane cess on intensive cane development work so as to bring about a rapid reduction in the cost of cane, alternatively, reduce as soon as practicable, the rate of the cess to a more reasonable figure, consistent with the requirements of cane development programme. Like-wise in respect of the co-operative societies commission, they recommended that it should be provided out of the money raised from the cane cess as the main function of these societies was development and marketing of cane which was also largely the business of the Government's Cane Development Department.

141. It is now nearly six years that these recommendations were made but no action has been taken and the industry has continued to suffer. The expenditure on co-operative societies commission is incurred only by Bihar and U. P. sugar mills and as such the industry in U. P. is at a disadvantage in comparison to the industry in the South. This disadvantage would now be more keenly felt when the position of the industry is threatened by new competitors.

142. We are conscious of the needs for the development of sugarcane crop and the sugar industry in general. At the same time, a total abolition of the cess by one stroke is likely to upset the budgetary position of the State Government. We, therefore, recommend that while the aim should be to abolish the cess altogether and only a small charge should be retained for developmental needs, in the present state of things, the reduction in the tax burden should be phased over a period of four years. Every year beginning with the fiscal year 1956-57, half-an-anna per maund per year cess should be reduced up to 1958-59. In 1959-60, the reduction should be three pies. Thus by the end of that year, a total tax burden, i.e. cess and commission taken

together, of two annas per maund would remain. Out of this, one and a half anna per maund should be spent on the development of the industry through the Development Councils and half-an-anna should be made over to the Co-operative Societies as their commission.

143. The method of realization of the cane cess is creating difficulties for the industry. According to the present policy of the Central Government, five to six lakh tons of sugar is now carried over to the next year so as to avoid any large fluctuations in sugar prices. This necessarily entails blocking of considerable finances by the factories. A major portion of this carry-over falls to the share of the industry in U. P. because due to transport difficulties, it has to carry over proportionately larger percentage of sugar in stock as compared to other regions. We, therefore, recommend that like the excise duty, the cess should be payable at the time of lifting of sugar from factory premises, and not when the sugarcane enters the factory gate.

144. *Electricity Duty and the Rates*—One of the major hindrances in the development of industries is the high electricity rates and the duty prevailing in the State. Besides the rates vary from area to area which is not conducive for the proper dispersal of industries. We shall deal with the problem of the duty first. The duty on industrial consumption of electricity is levied only in U. P., Bombay and Mysore. The rates are as follows:

Bombay City—

		Rs. a. p.	
(a) For Electrolytic Process	of	0 0 3 for every five units	} .. The incidence of duty is estimated at 0.6 per cent. of the total cost in a typical industry like textiles.
Electric Furnaces.			
(b) For other purposes	..	0 0 3 for every two units	
Uttar Pradesh	..	.. 25 per cent.	(on all types of consumption)
Mysore	..	.. 10 per cent.	(on the tariff rates for Industrial power)

It would thus be observed that the Bombay rate is negligible and all other States like Bihar, West Bengal, Punjab, etc. charge no duty on industrial energy.

145. The existing electricity rates in U. P. are quite high and they are a deterrent to the development of industries in the State. The charges for industrial power in other parts of the country like Delhi, Bombay, Calcutta and Ahmedabad are low. Coal is costlier at Ahmedabad than at Kanpur, yet the electric charges are lower there than those in Kanpur.

146. Electricity rates at Kanpur have risen since 1948 as would be observed from the following table in respect of consumption by six typical bulk consumers :

Serial no.	Consumer	Monthly consumption		Average rate per unit payable prior to 1st October, 1948	Average rate per unit payable after 1st October, 1948	Percentage of increase in rates
		KVA.	Units			
1	2	3	4	5	6	7
1	A ..	6,928	23,99,573	0.621	0.904	Per cent. 45.6
2	B ..	4,447	25,27,500	0.551	0.800	45.2
3	C ..	2,280	12,37,347	0.587	0.899	53.1
4	D ..	1,570	7,76,100	0.629	0.968	53.9
5	E ..	162	45,455	1.100	1.604	45.8
6	F ..	166	21,100	1.513	2.155	42.4

It would be observed that the rates have increased in all cases.

147. Besides this, from the facts and figures given in the Census of Manufactures (1952) we find that the cost of electricity is higher in U. P. as compared to other industrial States in the country, as would be observed from the following table :

	General Engineering	Cotton	Sugar	Vegetable Oil	Tanning	Glass and Glassware	Paper	Woollen	Paint and Varnish	Chemicals	Iron and Steel
	a. p.	a. p.	a. p.	a. p.	a. p.	a. p.	a. p.	a. p.	a. p.	a. p.	a. p.
Bombay	1 3 0 9	..	1 0 1 3	1 3 0 11	0 8	1 0 1 4	0 8				
West Bengal	1 2 0 7	..	1 0 1 3	1 0 0 7	..	0 11 0 9	0 7				
Madras	1 8 0 8	1 4 1 1	1 5 1 5	0 11	..	1 10 0 6	..				
Bihar	1 10	..	1 1 2 6	..	..	..	..	0 11 0 7			
Punjab	1 8	..	..	..	..	..	1 3	..	..	..
Uttar Pradesh	2 5 0 11	3 3 1 2	2 0 1 9	0 10	2 0 1 10	1 8 1 4					

We have tried another method of determining the cost of electricity as the percentage of total manufacturing cost in certain selected industries and find that the position is the same here as well.

Serial no.	Industry	State		
		Bombay	Bengal	Uttar Pradesh
1	Cotton Textiles	1.65	1.96	2.81
2	Vegetable Oils (excluding Vanaspāti)	0.17	0.50	0.85
3	General Engineering and Electrical Engineering	0.74	1.24	1.71
4	Chemicals	0.84	1.10	0.69
5	Paper	4.69	2.03	4.06

148. Apart from the percentage which the cost of electricity bears to the total manufacturing cost as shown above, the actual rates of electricity at are much higher than those obtaining at Calcutta and Ahmedabad



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From the above table it would be observed that the rates at Kanpur are more than 100 per cent higher than at Calcutta which would mean that a factory of the same capacity would have to spend several lakhs of rupees more on electricity alone at Kanpur than at Calcutta.

149. From all accounts it appears that the electricity rates are higher in U. P. than those in other States and the electricity duty of 25 per cent on industrial energy further increases the burden. We, therefore, recommend that the State Government should seriously consider this matter and take steps so that cost of electricity to industry is placed at par with that obtaining in States like West Bengal and Bombay. For this purpose the duty on industrial energy should be abolished and the rates brought down to lower levels.

150. *States taxes on motor vehicles and motor spirit*—An important factor which has impeded the development of road transport is the high incidence of taxation on motor vehicles and motor spirit. Besides, there are octroi duties, terminal taxes and wheel tax levied by some Municipalities. Then there is sales tax on motor vehicles and spirit etc. It was estimated by the Motor Vehicles Taxation Enquiry Committee that India pays the highest tax on motor vehicles in the world. The annual average tax per vehicle in India was about Rs.1,913 in 1952 which includes the tax even on baby cars. In later years this figure has increased to Rs.2,200. If the tax on a truck alone is taken, it would be in the neighbourhood of Rs.5,000 to Rs.6,000. The average earning of truck is estimated at about Rs.15,000 to Rs.20,000 per annum. This means that about 34 per cent of the revenue as pointed out by the truck industry, is taken away by Government. As against this in the U. S. A., the annual tax on a vehicle is Rs.409 and the tax incidence on trucking is $4\frac{1}{2}$ per cent. Because of high taxes, the cost of operation of a trucking company in India is as high as 42.3 pies per mile as against 34.03 pies per mile in the U. S. A., in spite of the high wages paid there. The average tax paid by a lorry, with a load capacity of 3 tons, assuming the load factor of 75 per cent, amounted to 21.91 pies per ton per mile as against the average rate charged by railways in 1948-49 of 9.18 pies. Such a high rate of taxation is crippling the road transport industry and it is, therefore, desirable that such an incidence is reduced to a reasonable level. A reduction in the level of motor vehicles tax would tend to increase the annual off-take of vehicles and thus make up for any fall in the existing annual revenue resulting from such reduction. The development of the transport industry would increase employment in the State and for this reason alone, if for no other, the State Government should reduce the burden on road transport. The Motor Vehicles Taxation Enquiry Committee had aimed at rationalizing the system of taxation and mitigating its burden. They had considered that in place of the existing multiplicity of taxes, so far as State Government and local bodies were concerned, there

should be only two taxes on motor vehicles, namely, the fuel tax and a motor vehicles tax. All other taxes were considered unnecessary as they were inequitable, vexatious, and burdensome. If these recommendations are accepted, the total loss of revenue for U. P., according to that Committee, would be Rs.87.63 lakhs. This, we consider, is not much as the benefits that would arise in the form of increased employment, establishment of new industries, and the improvement in transport facilities, would far out-weigh the sacrifice involved. We, therefore, recommend that the Motor Vehicle Taxation should be modified in the light of the recommendations made by the Motor Vehicles Taxation Enquiry Committee.

151. *Local Taxes*—Another set of taxation measures which adversely affect trade and industry are those imposed by local bodies like Municipalities, District Boards, and Notified Areas. The financial policy of the local authorities has no relation to that of the State Government. The tax policy of each local authority is also different and has no relation to that of the rest. The disadvantages of such an uncontrolled and un-coordinated tax system are obvious. It has created unequal tax burdens between one area and another. The widely different tax rates imposed by Municipalities and District Boards on goods and merchandise entering their territory do not make it possible to know the exact burden which trade and industry has to bear. A comparative table given below shows octroi rates for a package of cycle costing about Rs.120, in some Municipalities :

						Octroi Rs. a.
Kanpur	..	..	..	..	..	0 3
Varanasi	..	..	..	..	..	3 12
Jaunpur	..	..	..	..	..	7 8
Lucknow	..	..	..	..	..	1 4

152. Some of the industries are required to pay toll tax on lorries and carts passing through a Notified Area. This tax in the Gonda District is reported to be Re.1 per lorry and As.-2- per cart. In some areas the toll is as high as Rs.4 per lorry. In the case of one particular sugar mill, the toll tax on sugarcane, sugar, and stores came to Rs.25,000 for a particular year.

153. Local taxes have taken the form of taxes on trade, on persons, on property and fees and licences. There are 120 municipalities in U. P. There is a considerable variation in the levy of different taxes as would be observed from the following table :

						Municipalities
Octroi	..	..	..	..	..	47
Terminal Tax on goods	..	..	..	..	..	20
Terminal Toll	..	..	..	..	..	19
Toll on roads and ferries	..	..	..	..	..	37

154. From a perusal of the above table, it would be observed that Municipalities place too much reliance on indirect taxes. Octroi, terminal taxes and tolls form the most important sources of revenue for them. All these are ancient and primitive taxes and have their historical basis in the needs of the market in which the producer and trader required safety to carry on their market operations. In unsettled circumstances, this was justified. But under modern conditions, there is hardly any legitimate basis for their levy. Sometimes the same article may be taxed more than once. These octroi duties, not only harm trade and industry, but fall with inequitable weight on poorer classes. They also affect inter-regional and inter-State traffic.

155. We recommend that the Government should levy one form of local tax namely terminal tax out of octroi, terminal tax, and toll and that it should be low and uniform as far as possible. It should not bear unfairly on through trade, the cost of collection should be reduced and administration improved. We also recommend that for inter-regional and inter-State trade, diversional roads should be constructed so that they do not pass through local areas.

156. From the foregoing analysis of the taxes affecting trade and industry in U. P. it would be observed that the sales tax, the sugarcane cess and the various levies by local authorities take the form of commodity taxes. The basic principle of commodity taxation is the spreading of the burden of the portion of Government expenditure financed by this form of tax, in proportion to consumer expenditure, rather than in proportion to income or any other criterion. To the extent to which these taxes are not fully passed on to consumers, the burden rests directly upon trade and industry. These taxes, therefore, affect consumer expenditure in two ways, either the consumption is curtailed or if there are any savings they are affected. So far, there has been haphazard selection of commodities for the levy of general sales tax. It is, therefore, necessary that the taxes should be rationalized. It is equally necessary that taxes should be levied in such a way that adverse effects on trade and industry are avoided.

157. In the several representations made before us and in our discussions, we found that some of the industries in the State were facing special difficulties. In sugar industry, the problem raised was in respect of the uneconomic working of the sugar mills in certain districts, where there is lack of sugarcane. We have considered this problem and we are of opinion that some of the sugar mills, on account of non-availability of sugarcane, are not in a position to work economically. As against 120 to 150 days of working, they have an average duration of only 90 to 95 days.

158. We have considered all the aspects of the question and we are of opinion that a transfer of some of the sugar mills from their existing sites is desirable. The most important question for the State to consider is that if some of the factories are not shifted, all of them would continue to work uneconomically. We, therefore, recommend that irrigation facilities must be augmented in order to improve the sugarcane crop in these areas. These facilities would also help other crops so that the economy of the rural area in those districts where there is inadequate supply of sugarcane and other commercial crops is stabilized. This, however, is a measure which would take time. We consider that the shifting of some units from their present sites to more favourable areas where adequate supply of sugarcane is available, is imperative. However, the remaining sugar factories in that area should be able to guarantee the off-take of all the available sugarcane. They would thus be able to rehabilitate themselves without much difficulty. In this process no large problem of unemployment would arise, as the skilled personnel of the factory would migrate with the factory and unskilled workers would be able to find employment in the remaining factories which would have longer crushing season and better supply of sugarcane. The process of shifting would be a costly affair and we find that individual units may not be in a position to shoulder the burden. We, therefore, recommend that necessary financial assistance should be extended by the Government to those units which, in the interest of economic working, must be shifted.

159. In respect of the oil industry, it was stated that serious efforts had not been made in regard to the improvement of oilseed crops and the development of the oil mill industry. We, therefore, recommend that, apart from providing irrigation facilities, an Oil Development Commissioner on the lines of the Cane Development Commissioner should be appointed with over-all charge of development of oilseed crops and the oil mill industry. This industry is of vital importance to the State and, therefore, efforts should be made for its development.

160. It was also represented before us that a propaganda in some parts of the country had been carried on in regard to the presence of argemone which led to the forfeiture of huge quantities of oil in some of the States and consequent losses to the U. P. Industry. In order to guard against such propaganda, we recommend that the State Government should introduce the "AGMARK" Quality Scheme to the products of the oil industry, as well, so that certified oil is exported to other areas. This would help in restoring confidence in the industry.

161. A number of oil mills are closed and the remaining ones are finding it difficult to continue operating economically. One of the causes was occasional shortage of oilseeds. We find that the production of U. P. oilseeds (based upon 1953-54 figures) is disposed of as follows :

1953-54		(In tons)
Total production of oilseeds		8,70,683
Crushed by village ghanis (1,50,000 nos.) ..	1,83,688	
Seed required for domestic seed sowing purposes and storage losses	1,54,298	3,37,986
	Balance ..	5,32,697
Exports		1,21,234
		4,11,463
Imports		47,759
		4,59,222
Total available in the market for crushing by—		
(i) Large mills	2,93,902	
(ii) Small mills	1,65,320	4,59,222
		Nil.

It would be observed that the available seed is utilized. But some of the mills are closed. In the interest of the industry it is necessary to keep them working by insuring adequate supply of oilseeds. The question of supply of oilseeds can be solved by increasing the local production and by importing more oilseeds from other States like Madhya Bharat, Rajasthan, and the Punjab, etc. It must be clearly realized that an adequately developed oil industry would also give employment to a large number of workers and generally improve the rural economy.

162. *Industrial Relations*—For the development of industry, industrial peace is indispensable. It is, therefore, necessary that labour legislation and the enforcement machinery set up for its implementation should attempt to provide a frame-work in which employees and employers can come to terms whenever there are occasions for differences. All the possible preventive measures should be taken to achieve and maintain industrial peace. Peace can best be achieved by the parties themselves and, therefore, once disputes arise, recourse should be had to mutual negotiations. For this purpose it is necessary that the Conciliation Officers should entertain disputes only when they are satisfied that mutual negotiations have failed and that there is *prima-facie* case established. But this presupposes the existence of truly representative worker's union in a given undertaking. Multiplicity of trade unions, political rivalries and disunity in the

ranks of the workers are some of the major weaknesses which create great difficulties for the employers. For this purpose we recommend, in a factory only one union should be recognized for negotiation.

163. Another important problem relates to wage levels obtaining in some of the industries. For instance, the minimum wages of cotton mill operatives are higher in Kanpur as compared with those of Calcutta, Madras and Nagpur, as would be evidenced from the following figures :

			1954	1955	
			Rs. a. p.	Rs. a. p.	
Bombay	..	..	95 6 11	94 12 11	per month
Ahmedabad	..	..	96 14 6	82 11 4	Ditto.
Nagpur	..	..	67 3 11	66 2 10	Ditto.
Madras	..	..	71 7 3	67 7 3	Ditto.
Calcutta	..	..	50 2 5	50 2 5	Ditto.
Kanpur	..	..	80 10 2	73 5 5	Ditto.
					with which to be added the personal wage of Rs.4.

N. B.—The element of dearness allowance is subject to variation according to the cost of living.

This is also borne out by the figures of annual earnings of the factory workers on the cotton industry for the year 1954 which are as follows :

Bihar ..	..	..	..	..	960.6
Madras ..	..	..	..	..	891.4
West Bengal ..	..	..	..	..	931.3
Uttar Pradesh ..	..	..	..	..	1060.1
Bombay ..	..	..	..	..	1268.1

164. One important point which has to be noted is that the industry at Kanpur should not be judged from the standards of Bombay and Ahmedabad which are big cities with high living costs and where the substantial quantity of cloth produced consists of finer counts which has greater capacity to absorb high wages. Kanpur cotton mill industry produces coarse cloth, which is low priced and consequently high wages make its production uneconomic.

165. In respect of paper and paper products and leather and leather products industries also it would be observed that wages in Uttar Pradesh are

higher than those in Bengal and Madras. In regard to the leather industry, the wages were the highest in U. P.

		Bombay	Uttar Pradesh	West Bengal	Madras
		Rs.	Rs.	Rs.	Rs.
Paper and paper products	.. ..	1233.3	917.9	857.6	427.7
Leather and leather products	.. ..	972.3	1103.7	794.2	556.9

166. If the wages elsewhere are lower than in U. P., the industries in U. P. would be adversely affected. It should not be understood that we are in favour of lowering wages. On the other hand, we are of opinion that if the standard of living has to rise, wages will have to be increased but commensurate with production. We should aim at the goal of progressively rising wages. But for this purpose labour productivity has to rise proportionately otherwise the cost-structure would be disturbed. What is ultimately desirable is that the real income of the workers should increase and this can be possible only if it is backed by increased production. The American experience is a very helpful guide in this regard. In America the wages are very high, still their cost is low, because of high labour productivity. It is, therefore, necessary that this aspect of the question is kept in view. However, disturbed labour conditions, indiscipline, reduction in the output per worker and such other matters are, no doubt, serious. Industries cannot thrive under such conditions. They are also affected adversely if wage levels in other regions are lower than those in U. P., for the same turn-over. We, therefore, suggest that this aspect of the question should be kept in view by Government when awarding high wages and bonuses to the workers in the State.

167. We have been informed that Kanpur labour, which represents the majority employed in the State, is considered to be more difficult to administer than elsewhere. Such an impression should not gain currency and should be removed as early as possible. For this purpose, we have already suggested that only one union should be recognized for a factory. It is also necessary that the Government labour policy without being prejudicial, should be firm.

168. Another difficulty brought before us, related to the number of closed days, which is much higher in Kanpur than in other States. We are informed that as against 56 days in Bombay there are 72 non-working days at Kanpur. We give below a statement showing the number of working days

in different industrial centres from which it would be evident that the number of working days is the lowest at Kanpur.

Centre	Number of working days					
Bombay	306
Ahmedabad	310
Baroda	309
Indore	302
Bangalore	303
Calcutta	308
Sholapur	306
Nagpur	311
Madras	303
Kanpur	295

169. Though there is no law governing the closed days in the factories at Kanpur, except the weekly days of rest as prescribed in the Factories Act, a large number of festival and other holidays are awarded through adjudication awards, which have legal force behind them. This may be so, but the fact remains that the number of working days is less at Kanpur. The situation is complicated by the fact that labour is unwilling to work on Sundays in lieu of festival holidays, and, therefore, it is not possible to keep down the number of non-productive days. This has resulted in lower production. It is, therefore, suggested that the Government should look into this matter.

170. The existing Welfare Officers Rules prescribe salaries and other amenities which throw, upon the employer, additional burden, which a number of them may not be able to carry. Salaries of Welfare Officers in U. P., have been fixed by Government whereas the Government of Madras and Bombay do not lay any down scales of pay and the Government of West Bengal have fixed only a minimum. We are also informed that the appointment, discharge and dismissal and other conditions of service have been laid down by the Government. This is not fair. We, therefore, suggest that these measures should be reviewed, in consultation with the interests concerned and, in all such measures, the interests concerned, should be given due opportunity to present their views.

171. The provision obtaining in the Employees State Insurance Act, according to which workers are not obliged to give notice to the employers about their absence and its cause has created difficulties. As a result of this

managements find themselves unable to take necessary action against workmen who may remain absent for months and there is nothing to indicate as to when they will return to duty armed with the necessary medical certificates. This should be looked into and remedial measures taken.

172. One peculiar feature obtaining in U. P., is that it has a separate Industrial Disputes Act and although the Industrial Disputes Act (1947) of the Central Government applies to it, the conciliation and adjudication machinery obtaining in the State functions under the U. P. legislation. We find that the U. P. legislation is not comprehensive and as such, sometimes, it creates difficulties. We, therefore, recommend that the Central legislation should be made applicable to the State, failing which, the State legislation should be made comprehensive on the lines of the Central Act.

173. It has been represented to the Committee that the application of certain provisions of the Factories Act to some of the labour intensive, small-scale ancillary industries causes hardship. We are of opinion that such hardships can be mitigated by Government Officers taking a lenient view of the matter.

174. We also recommend that the State Government purchases should be made on the basis of proper specifications as is being done by the Central Government. This would be helpful in eliminating spurious supplies, which is necessary in order to aid organized sector of industries.

175. *Conclusions*—We have now examined the main hindrances, which stand in the way of industrial progress. We have observed that Government taxation measures like sales-tax, sugarcane cess, Co-operative Societies' Commission, local taxes, electricity duty, taxes on motor vehicles and motor spirit have been responsible for stagnation of some of the major industries of the State. Besides, high electricity charges have burdened the industries. We have suggested possible lines of reforms which would remove many of the difficulties.

VI. DEVELOPMENT OF NEW INDUSTRIES

176. The Second Five-Year Plan seeks to build the foundations of industrial progress, and to secure the balanced development of all parts of the country. It is the aim of the planners to provide for a larger increase in production, in investment, and in employment. In this development the needs of each part of the country have been recognized. In so far as U. P., is concerned, as explained earlier, development of industries is urgent. When the State has acquired so much control over economic forces, we are of the opinion that unless both the Central and the State Government actively stimulate industrialization, progress would be slow.

177. *Need for Dispersal of Industries*—We would like to emphasize that for mitigating the social evils and for better balanced industrial development of the State, future industrialization should be attempted at places besides Kanpur. From a rapid survey we find that there are many places through the length and breadth of the State where new industries can be established. Such dispersal of industries would be of great advantage from several points of view. The rural economy would be benefited, the workers would be nearer their homes, and the social evils which are attendant upon congestion would be avoided. Industries would need certain facilities like means of communications, by rail and road, power, housing, and in some cases, sufficient water supply. The reason for concentration of industries at Kanpur in the past has been the presence of these facilities. The Government should ensure that all these facilities are made available at sites that may be selected in future. In respect of housing, in particular, we would like to reiterate our recommendation that the State Government should provide houses for the workers wherever new industries are started so that industries would be dispersed and all the regions would be properly developed.

178. In the previous three Chapters, we have stated the basic factors which are necessary for successful industrial production and have examined the deficiencies and hindrances that stand in the way of industrial growth and have made certain suggestions for their removal. If that is done, a number of industries can be developed. The future development can take place in two directions: firstly, existing industries can be expanded and secondly, a number of new industries can be started.

179. There are numerous industries which can be developed in the State but it is not possible to deal with all of them in this Report. Therefore, we have confined ourselves to those industries which have been included in the Second Five-Year Plan, and a few others which, it is considered, can be started

in the State. All these industries, excepting a few, are regulated under the Industries (Development and Regulation) Act. In foreign countries, where the standard of living is high, a number of industries have developed to meet the demand above the basic needs. But in a country like ours where the standard is low, the pattern of development has to be different as we have to meet the basic needs first. From this point of view, we have considered only those industries which can be easily established. It may appear that the number of industries we have considered is small. We are, however, of the opinion that if these industries could be established, it would by itself, mean a big advance and would pave the way for further industrialization in the State in other directions. In making these suggestions, the Industrial Policy Statement of the Central Government has been kept in view. According to this statement, some of the industries are the responsibility of the Government. Barring a few exceptions, a number of industries in the public sector, can be successfully established in U. P. These we have included in the list of new industries.

180. Apart from this, the entire field has been left to private enterprise. We consider that progress can be achieved mainly through the development of these industries. From the point of view of availability of resources and situation of the State, barring a few industries like ship-building which can be started only in a shipping yard, almost any kind of industry can be developed here. These industries will cater either to internal requirements or to export to other places or to both.

181. The argument that a particular industry cannot be established at a particular place owing to certain particular conditions is largely untenable, when technological advances have made it possible in other countries.

182. In foreign countries, like the U. S. A. and the U. K., we find that there are two types of industries developed, namely, consumer goods and durable consumer goods and capital goods industries. An analysis of the employment figures indicates that the labour population is divided between these two groups on 50 : 50 basis, and we find that the largest scope for employment is in durable consumer goods and capital goods industries. Such industries also provide a basis for the development of other industries by making available plant and machinery and facilities for repairs. Real industrial progress comes only when such industries begin to be established.

183. In Uttar Pradesh, the new industries would fall in both these groups. However, on account of low standard of living durable consumer goods industries cannot be started, on any large scale, unless the purchasing power goes up. To begin with, therefore, consumer goods industries have to be developed and simultaneously some capital goods industries should be started. This would lead to the development of durable consumer goods industries in due course.

184. This has been greatly facilitated owing to the new change in the price fixation policy whereby pig iron and steel which are the basic raw materials for some of the industries are available at every rail-head at a uniform price.

185. *Programme of Development*—According to the Second Five-Year Plan, the programme for development of industries is divided into three parts : (i) Public Sector ; (ii) the National Industrial Development Corporation (NIDC) and (iii) the Private Sector. Within the framework of the present industrial policy, the expansion of industrial capacity has been conceived in terms of the following priorities :

- (1) increased production of iron and steel and of heavy chemicals, including nitrogenous fertilizers, and development of heavy engineering and machine building industries ;
- (2) expansion of capacity in respect of other developmental commodities and producer goods such as aluminium, cement, chemical pulp, dyestuffs and phosphatic fertilizers and of essential drugs ;
- (3) modernization and re-equipment of important national industries which have already come into existence such as jute and cotton textiles and sugar ;
- (4) fuller utilization of existing installed capacity in industries where there are wide gaps between capacity and production ; and
- (5) expansion of capacity for consumer goods keeping in view the requirements of common production programmes and the production targets for the decentralized sector of industry.

186. India is planning for vast expansion of her iron and steel industry which would result in the availability of large quantities of iron and steel which is available at a distance of about 300 miles from the border of U. P. Based upon these raw materials, a number of engineering industries within the framework of the Plan can be established in the State. High priority has been accorded to the development of heavy engineering industries, as they would provide, from within the country, a wide range of industrial machinery and capital equipment such as locomotives and power plant for the generation of electricity. The development of electrical energy, on a large scale, would require a number of products of the electrical engineering industries some of which, though established in the country, would not be able to fully meet the demand. These developments have priority second only to that of expansion of the steel industry. Similarly, in order to carry out the programme for agricultural development, it is planned to expand the capacity for the production of nitrogenous fertilizers. In the same way, cement as a development commodity, has been

given a high priority. The Plan also emphasizes the need for modernizing and re-equipment of existing industries like cotton, sugar and jute. A vast field is open for the expansion of the capacity for consumer goods industries.

187. *Programme in the Public Sector*—In order to determine the scope for development of industries, in the public sector, in U. P., we have examined the programmes of development which have been included in the Plan in which U. P. can be interested. These are as follows:

188. *Fertilizer Production*—By 1960-61 the consumption of nitrogenous fertilizers is estimated at 3,70,000 tons in terms of mixed nitrogen. The annual capacity, at present, is for about 85,000 tons. There is, thus, a wide gap between the existing capacity and the anticipated requirements. In the Second Plan two more Fertilizer Factories have been proposed to be set up. Any one of these plants could be established in the State.

189. *Railway Equipment*—The railway plan makes a provision of Rs.8.5 crores for a meter gauge coach factory to be set up during the Second Plan and Rs.7.0 crores for two engineering shops to manufacture spare parts. Considering that U. P. has the net-work of the North Eastern Railway, one of the largest meter gauge systems in the country and the central position of U. P. for facilities of distribution, these plants can be located in the State.

190. *Anti-biotics*—The question of manufacture of basic drugs from primary raw materials and the expansion of D. D. T., products is being considered. It is proposed to increase the capacity of D. D. T. products from 700 tons to 2,800 tons by 1960-61. This would provide scope for development. There is a market for D. D. T. and anti-biotics in U. P. and for any of these factories U. P. would be suitable.

191. *Other Industries*—Other industries in the Public Sector for which no plans of development have been drawn up except where expansion of existing capacity is intended, are locomotive, aircraft, arms and ammunitions, telephones, telegraph apparatus and wireless communication apparatus, and industrial explosives. Development of a heavy industry like aircraft confers great advantages on the area where it is developed, as it leads to the development of secondary industries for the manufacture of components and parts, instruments, motors, etc. We recommend that the manufacture of aero-engines which the Government of India are proposing should be considered for establishment in U. P. Whenever Government of India plan for development of any one of these industries the case of U. P. should be kept in view. U. P. has three important advantages, namely, (i) central situation which would facilitate distribution of products, for instance, in the case of railway equipment, (ii) in certain cases a market inside the State itself for instance in the case of fertilizers,

and (iii) the strategic considerations. We, therefore, recommend that in the future development of any of these industries, the case of U. P. should be considered.

192. *Plans of National Industrial Development Corporation*—In the Second Five-Year Plan a provision of Rs.60 to Rs.65 crores has been made in the plan of the Ministry of Commerce and Industry for purposes of direct assistance to industries. Of this, a sum of about Rs.55 crores will be available for the activities of the NIDC. A part of these resources tentatively placed at Rs.20 to Rs.25 crores is expected to be utilized for assisting the modernization of the cotton and jute textile industries. The remaining Rs.35 crores are to be devoted to pioneering new basic and heavy industries.

193. The projects taken up for investigation by the NIDC include cast Iron Foundry, Forge Shops, Structural Fabrication, Steel Foundry, Refractories, Industrial Machinery, Newsprint, Carbon Black, Rayon and Staple Fibre, Chemical pulp and Synthetic Rubber. Besides, the establishment of a new unit in the aluminium industry and the manufacture of heavy equipment for earth moving, mining, etc. and rolls and rolling mill equipment required in ferrous and non-ferrous industries would be fostered. We consider that U. P. offers a fair location for aluminium and synthetic rubber. The development of the Rihand Dam could supply cheap electric power to the aluminium industry. For synthetic rubber, U. P. has suitable raw material in its power alcohol resources.

194. *Development in the Private Sector*—The programme of development envisaged under the private sector (other than mining, electric power, generation and distribution, plantation and small-scale industries) will entail a total outlay of Rs.720 crores comprising Rs.705 crores of new industries and Rs.150 crores on replacement and modernization. This also includes expansion of the Steel Industry. On the basis of the present needs of the State, we consider that during the next five years, a minimum investment of Rs.100 crores in new industries should be attempted in the State. This does not take into account the large investment envisaged in the public sector such as upon the iron and steel industry. A number of industries can be started although they may not have been included in the Plan to the extent suggested by us. On the basis of its needs, U. P. requires much more investment. Yet we are recommending an investment of only one-tenth of the total outlay on industrial development in order to make a start. We, therefore, recommend that the following industries should be established.

195. *Cotton Textiles*—During the Second Five-Year Plan, it is proposed to raise the capacity for cotton piece goods from 4,920 million yards to 5,500

million yards. According to the cloth policy announced by the Government of India in the middle of June, 1956, the target of production on the basis of 18.5 yards *per capita* plus 1,000 million yards for export, has been placed at 8,400 million yards. The new policy, therefore, provides for the additional demand of 1,700 million yards of cloth. Out of this 350 million yards have been allocated to automatic looms. A balance of 150 million yards remains still unallocated as between the mill industry and others. Moreover, the present *per capita* consumption including hand-loom cloth of 18.5 yards is likely to go up, according to some, to 22.5 yards. If that comes about 1,440 million yards of cloth would be further needed to meet the demand. Production of cloth in U. P. is only about five yards *per capita*. To increase the production to 15 yards *per capita*, at least additional ten lakhs of spindles and 24,000 looms would be needed. We, however, recommend that, about five lakhs of additional spindles and 12,000 looms should be established in the State during the next five years. On the above basis 25 to 30 new cotton mills, with an average of 20,000 spindles and 500 looms can be started in the State during the next five years. It is estimated that the installation of these mills would require an investment of Rs.30 crores, which would offer employment, on an average, to about 50,000 people.

196. *Woollen Piece Goods*—It is proposed to increase the capacity of woollen piece goods from 48 million yards to 50 million yards and that of woollen worsted yarn from 38 million lb. to 45 million lb. Thus there is a gap of seven million pound in the case of yarn and two million yards in cloth production. Requirements of woollen materials are mostly in Northern India on account of climatic conditions. Another mill, therefore, could be located in U. P. We consider that a mill with about 20,000 spindles and 500 looms would be able to meet the needs. The investment would come to about Rs.2.5 crores which would provide employment to about 3,000 workers.

197. *Rayon*—The present capacity for viscose filament and acetate filament and staple fibre is estimated at 38 million lbs. per year. It is proposed to increase this capacity to 100 million lb. which would mean an increase of 62 million lb., 46 million lb., for viscose and acetate filament and 16 million lb. for staple fibre. We consider that the demand for rayon would increase. There are a number of natural advantages in U. P., because apart from a considerable market, chemicals in the form of Power Alcohol are available for acetate process. We recommend that a capacity of 25 tons for the production of rayon should be established in U. P. For such capacity, an investment of Rs.12.50 crores would be needed which would give employment to about 4,000 workmen.

198. *Sugar*—As we have explained in Chapter II, Sugar Industry is suitable to the soil of U. P. Our attention has been drawn to some propaganda carried on against the suitability of U. P. for Sugar Industry. We have examined this case carefully and we are of the opinion that there is not much force in this argument. In U. P. the sugarcane crops require a minimum of only two irrigations as against 15 to 35 irrigations in places like Bombay and Madras because the depth of the soil is shallow there and, therefore, the retention of moisture is small. We, therefore, consider that the sugar industry in U. P. should receive the necessary encouragement for its proper growth and development. Under the present circumstances, the industry in some districts is running uneconomically. As recommended earlier, some of the factories should be helped to shift to more suitable sites. On account of the growing habit of the people to consume more sugar, demand for sugar is increasing. We, therefore, recommend that an additional production of at least five lakh tons should be aimed at. We also recommend that, in future, no factory should be allowed within a radius of 50 miles of any existing factory so that cane supplies are ensured to all of them and their economic working is not hampered. This would mean an investment of Rs.20 crores and would provide employment to about 20,000 people.

199. *Power and Industrial Alcohol*—The development of the rayon industry referred to above and the synthetic rubber mentioned subsequently will make a large demand for Power Alcohol. Moreover, Government of India are planning for developing industrial consumption of alcohol on a such larger scale. Expansion of production of D. D. T., establishment of the manufacture of polyvinyl chloride, and polythene are some of the lines of development which would afford a large-scale outlet for industrial alcohol. Therefore, the development of power alcohol industry is strongly recommended. During our discussions, we considered the question of utilization of molasses if and when total prohibition was enforced. We consider that the development of this industry and its consumption in rayon and synthetic rubber industries and others would afford a great relief to the industry and, therefore, we recommend that the industry should be developed.

200. *Paper and Board*—It is estimated that the consumption of paper would increase to 3,50,000 tons from its present level of 2,00,000 tons per annum.

201. The present capacity of a paper mill is about 50 tons per day but the tendency now is to expand up to 100 tons or more per day. It is anticipated that the capacity might go to even above one lakh tons per annum as in foreign countries. We, therefore, recommend that expansion of the industry should be aimed at to the extent of an investment of about Rs.5 crores. This would offer employment to about 2,000 people.

202. *Cement*—At present, the normal size of a cement plant is of a capacity of 750 tons per day but some factories are going up to even 2,000 tons and we are of opinion that the trend in future would be to go even above 2,000 tons. We, therefore, suggest that a cement factory should have sufficient reserve capacity. We are informed that limestone deposits are available at Dehra Dun, Banda and Kathgodam, in addition to Churk where the Government Cement Factory has already been established. We suggest that possibilities of lime-stone deposits at other places should be investigated early and immediately the survey of the coal deposits in the Mirzapur area should be undertaken. We strongly recommend the immediate development of the Cement Industry and its allied products. At least one million tons capacity for cement should be established in the State during the period of the next Plan. This would mean an investment of Rs.10 crores and would give employment to 5,000 persons. For the time being, we recommend that each factory should have an annual capacity of 2,50,000 tons.

203. *Engineering Industries*—As we have indicated earlier in this Chapter, there is a vast field for the development of engineering industries in the State. We recommend that in the development of following engineering industries, an investment of Rs.10 crores should be aimed at. This would give employment to about 15,000 persons.

204. *Structural Fabrication*—At present, there is no structural fabrication capacity in U. P. Efforts should be made to establish structural fabricating shops at suitable places in the State in order to meet the existing and potential demand of the State.

205. *Railway Rolling Stock and other equipments*—The manufacture of different items of railway rolling stock which are at present being imported or which are in short supply should be attempted.

206. *Industrial Machinery*—The investment proposed in the Second Plan on these items is as under :

Industrial Machinery

						(Rupees in crores)
						Investment (1956-61)
(a) Cotton Textile	..	..	..	..	..	4.5
(b) Jute Textile	..	..	..	..	..	1.3
(c) Cement	..	..	..	..	..	1.0
(d) Sugar	..	..	..	..	..	2.0
(e) Paper	..	..	..	..	..	1.3
(f) Printing	..	..	..	..	..	1.5
Total						11.6

207. We recommend that some of these items should be made in the State

208. *Machine Tool Industry*—The plan for Machine tool and other heavy machinery industries envisages an investment of Rs.10 crores. The development of machine tool industry would greatly aid industrialization and the growth of other industries for which machine tools have to be obtained from abroad. We, therefore, recommend that during the Second Five-Year Plan, its manufacture should be established in the State.

209. *Diesel Engines*—There is a gap of 20,000 engines between the present and proposed capacity between now and 1960-61, in the diesel engines industry which is at present highly centralized in Bombay although its products are needed all over the country. In so far as U. P. is concerned, there is considerable demand for them. We suggest this industry should be developed in the State.

210. *Bicycles*—The Second Plan envisages an additional capacity for about 5,00,000 cycles. Cycle is a poor man's vehicle and Northern India has a vast market. We are of opinion that the demand for bicycles would go up with the increase in the standard of living of the masses. We, therefore, recommend that a cycle factory with an annual capacity of 2,00,000 bicycles should be developed in the State.

211. *Power-Driven Pumps*—U. P. being an agricultural State has considerable demand for power-driven pumps for irrigation purposes. As against the present capacity for 67,492 pumps, the Plan envisages its development to 86,000 pumps which means that there is a gap of about 18,500 pumps. The demand for pumps largely comes from States like U. P., Bihar, Punjab, Madhya Pradesh, etc. Efforts should, therefore, be made to establish this industry in the State.

212. *Transformers*—Transformer Industry is one of the producer goods industries and is a great aid in the establishment of power generating stations and consumption of electrical energy. Its production is planned to be increased from 675,000KVA. to 1,310,000KVA. We recommend that the manufacture of transformers should be established in the State.

213. *Electric Motors*—The production of electric motors is proposed to be increased from 292,000 H.P. to 600,000 H.P. in the Second Plan which means an addition of about 300,000 H.P. Like transformers, electric motors are also an important mechanism for consumption of electricity. We, therefore, recommend that the establishment of this industry should be fostered in the State.

214. *Switchgear*—For consumption of electricity, switchgear industry for the manufacture of starters, switches, fuses, iron clad switches, motor control

circuit breakers, oil circuit breakers, distribution and switchboards and control panels is very important. We recommend the establishment of this industry in the State.

215. *Cables and Wires*—In the Second Five-Year Plan, it is proposed to increase the present capacity of 15,370 tons for ACSR Conductors to 20,400 tons per annum. Thus there is a gap of about 5,000 tons in the estimated demand. Besides, the demand for other kinds of wires and cables will grow all over the country as power schemes fructify. We recommend that the manufacture of all types of Conductors, wires and cables should be established in U. P.

216. *Sewing Machines*—There is a great scope for development of sewing machine industry on account of an expanding market. At present there is only one large plant situated in West Bengal. We recommend that the manufacture of sewing machines should be started in the State.

217. *Electric Lamps*—In the Second Five-Year Plan the present annual capacity of 31 million lamps is proposed to be raised to 50 million lamps which means there is scope for the development of the industry by another 19 million lamps. At present the industry is highly concentrated in West Bengal. In U. P., there is already a unit in existence at Shikohabad. The market for lamps is all over the country and the central situation of the State will give it an added advantage for distribution purposes. We recommend that the capacity for electric lamps should be expanded.

218. *Inland Water Transport*—We have recommended in a previous Chapter that inland water transport should be developed on a large scale. If river navigation is properly developed, we are of opinion that a useful shipping industry can be developed in the State. This will also lead to the manufacture of small barges.

219. *Other Industries*—Besides the industries including small tools which have been treated separately in the above paragraphs a number of other industries can be started in the State. We give below a table showing the present capacity, production, the estimated requirement in 1960-61, the targets of production and capacity and the reasons for their establishment in U. P. It may be noted that in certain cases there are positive advantages in locating a certain industry in U. P. In case of some others while there are no definite advantages, there are no disadvantages. Therefore, any of these industries could be started in the State.

Industries	Unit	Estimate of annual capacity as on 31st March, 1956	Estimated production in 1955-56	Estimated requirements in 1960-61	Targets for 1960-61				Availability of raw materials	Markets
					Annual capacity	Production				
1	2	3	4	5	6	7	8	9		
Based on Agricultural and Animal Resources—										
1. Silk	..	..	..	..	..	..	..	..	Raw material imported.	Internal and external markets available.
2. Cotton seed oil	.. Tons	N.A.	10,000	..	30,000	30,000	Ditto	..	Market extensive.	
3. Biscuits and confectionery.	Do.	80,000	19,500	25,000	80,000	25,000	Raw material available.	Special types of biscuits and confectionary may be attempted.		
4. Wheat products—Corn flake, Shredded wheat, Oat-meal, etc.	..	..	..	..	..	..	Ditto	..	Internal and external market.	
5. Starch	..	..	..	..	..	..	Ditto	..	Ditto.	
6. Fruit Canning	..	..	..	..	..	..	Ditto	..	Ditto.	
7. Milk products	..	..	..	..	..	..	Ditto	..	Ditto.	
8. Leather goods	..	..	..	..	..	..	Ditto	..	Ditto.	
9. Tanning and Footwear (Western).	Mill Pairs	5-97	3-2	100-0	5-97	5-97	Ditto	..	Ditto.	

10	All mill-stores and other articles from leather.	..	..	..	..	..	..	..	..	Ditto	..	Ditto.
11.	Tobacco ..	..	..	..	..	..	..	..	..	Ditto	..	Internal and external market available.
Based on Forest Resources-												
12.	Rosin and Turpentine	..	..	..	..	..	..	..	..	Ditto	..	Ditto.
13.	Katha and Cutch ..	..	..	..	..	..	..	..	..	Ditto	..	Ditto.
14.	Plywood ..	Mill sq. ft.	150-6	110	100	..	..	..	..	Ditto	..	Ditto.
					(Tea Chest only)					150 (including commercial plywood)		
15,	All machine mill-stores and other articles from wood.	..	..	..	..	..	..	..	..	Ditto	..	Ditto.
Based on Mineral Resources-												
16.	Glass and glass-ware, (other than bangles).	Tons	291,000	125,000	200,000	334,000	200,000	..	..	Ditto	..	Ditto. (New lines of manufacture promising).
17.	Thermos flask	..	..	..	..	..	..	..	..	Ditto	..	Ditto.
18.	Coated abrasives	Reams	150,000	80,000	150,000	255,000	150,000	Raw material imported.	..	Ditto	..	Ditto.
19.	Grinding wheels	Tons	1,520	850	1,500	2,110	1,500	Ditto	..	Ditto	..	Ditto.
20.	Ceramics ..	..	..	..	..	..	..	Ditto	..	Ditto	..	Ditto.
Engineering and metallurgical Industries-												
21.	Steel tubes	..	..	..	..	..	..	Raw material to be imported.	..	Ditto	..	Internal and external market available.

Industries	Unit	Estimated production in 1955-56 as on 31st March, 1956					Targets for 1960-61		Markets
		Estimate of annual capacity	Estimated production in 1955-56	Estimated requirements in 1960-61	Annual capacity	Production	Availability of raw materials		
1	2	3	4	5	6	7	8	9	
22. Storage Batteries	.. Nos.	.. 307,500	225,000	425,000	350,000	350,000	Raw material to be imported.	Internal and external market available	
23. Torches	..	..	..	..	..	..	Raw material available.	Ditto.
24. Typewriters and Duplicating machines.	..	..	..	..	..	..	Raw material partly to be imported.	Ditto.
25. Radio Receivers	.. Nos.	.. 162,000	80,000	200,000	162,000	200,000	Ditto	Ditto.	
26. Scientific Instruments	..	..	..	..	..	..	Raw materials to be imported.	Ditto.
27. Mathematical, Surveying and Drawing instruments.	..	..	..	..	..	..	..	Ditto.
28. Agricultural implements	..	..	..	..	..	..	..	Ditto.
29. Small tools	..	..	..	..	..	..	..	Ditto.
30. Hand tools	..	..	..	..	..	..	..	Ditto.
Heavy Chemicals—									
31. Acids—									
Acid Sulphuric	.. Tons	.. 242,000	170,000	470,000	500,000	470,000	Raw material to be imported.	Ditto.	

32. *Alkalies—*

	..	Tons	..	90,000	80,000	230,000	253,000	230,000	Raw Materials required are salt, limestone, coke, ammonium sulphate and sodium sulphide. Lime-stone of inferior quality is available. Other materials can be imported.	There is a market locally for glass, textiles and paper industries, besides general consumers like Dhobies and Laundries. Though there is some disadvantage, it is not much.
(a) Soda Ash	90,000	80,000	230,000	253,000	230,000		

(b) Caustic Soda

.. Tons

44,300

36,000

168,800

150,400

135,400

Raw material imported but electricity will be available.

Extensive market for Soda, but problem of Chlorine disposal would be there.

33. *Fertilisers—*

	..	Do.	..	15,000	11,000	370,000	380,000	360,000	Imported raw materials,	Internal and external market available.
(a) Nitrogenous	..	Do.	..	15,000	11,000	370,000	380,000	360,000		

(b) Phosphatic as P² O⁵

Do.

35,000

20,000

120,000

120,000

120,000

Ditto ..

Ditto.

34. *Pharmaceuticals and Drugs.*

..

..

..

..

..

Ditto ..

Ditto.

35. *Paints and Varnishes—*

	..	Tons	..	65,000	39,000	60,000	65,000	60,000	Raw material to be imported.	Ditto.
(a) Oil-based paints and enamels.	65,000	39,000	60,000	65,000	60,000		

	..	Gallons	..	800,000	300,000	500,000	800,000	500,000	Ditto ..	Ditto.
(b) Nitro-cellulose lacquers	800,000	300,000	500,000	800,000	500,000		

220. It would thus be observed that as shown below, the scheme of development we have envisaged will need an investment of Rs.100 crores and will provide scope for employment to about 1,20,000 persons :

				Rupees in crores	Number of persons estimated to be employed
Cotton Textiles	..	..	..	30	50,000
Woollen Textiles	..	..	..	2.5	3,000
Rayon	..	..	..	12.5	4,000
Sugar	..	..	..	20	20,000
Paper	..	..	..	5	2,000
Engineering Industries	..	..	..	10	15,000
Others	..	..	..	20	25,000
Total				100	1,19,000

221. Over and above the scope for employment indicated above, about 15 to 20 times more people would be engaged in tertiary and other occupations. The development of the transport industry itself would generate employment on a large scale. The development envisaged above would also give rise to a number of associated and subsidiary industries which would offer greater scope for employment. This would be a good beginning for the State.

222. *Conclusion*—From the programme of development given in the preceding pages, it would be observed that we have tried to give a list of industries for development which is based upon the information collected, within the short time, at our disposal. Individual entrepreneurs would have to go more deeply into particular cases. We have not considered many other industries for which there may be favourable circumstances. For the matter of that no list could ever be regarded as exhaustive. We have only set a pattern and we hope that if development proceeds on the lines indicated, a great advance can be made. An investment of the order envisaged during the next five years would almost double the scope for employment. Development of industries of this order would give momentum for the establishment of new industries in the vicinity of large ones and elsewhere. It would also provide a good opportunity for the establishment of other industries later on.

223. It is clear that all these schemes would fructify only if Government are prepared to and actually take steps to actively stimulate industrialization. The industrialization of the State would depend upon the adoption of a co-ordinated policy which would stimulate greater effort in the cause we have in view.

224. Investment of the order envisaged will be possible only if joint efforts are made by all sections of the people. It would need the ungrudging support of every section of the community, the businessman, the industrialist, ex-Taluqdars, the Government and the people who are interested in building up the State.

VII. INDUSTRIAL FINANCE

225. The important role that finance plays in industrial growth for production and consumption needs no emphasis. One of the primary economic deficiencies of Uttar Pradesh has been the non-availability of sufficient capital. This difficulty is attributed partly to the insufficiency of financial resources, partly to the inadequate use made of available capital, and partly to the serious competition which Government have offered in the money market to private enterprise.

226. Due to lack of strong financial institutions and an active stock exchange, the State has not been able to build up any sizeable money market and not much has been done so far to improve the facilities for financing industries in the State.

227. The programme of development of industries which we have envisaged in the preceding Chapter involves finances for two purposes : (i) expansion of existing industries and (ii) the development of new industries. The earnings of established industries, have been declining in the State for some time past. Ploughing back of profits was possible when taxes were not so heavy. It helped the expansion of Industry. Today modernization and expansion of industry have been held in check since sufficient finance is not available for the purpose. Besides, this has also affected the attraction of fresh capital for the development of new industries. From a study of Census of Manufactures, we find, that among all the States, the rate of increase in the employment of productive capital has been the lowest in U. P. as indicated by the following figures :

State	Productive capital employed in crores of rupees				
	1948	1949	1950	1951	1952
Bombay	157.88	167.49	212.51	237.55	237.83
West Bengal	128.20	130.50	151.47	163.39	157.77
Bihar	48.40	51.79	64.47	73.40	93.26
Madras	47.98	55.60	61.69	75.61	73.55
Uttar Pradesh	63.61	54.25	59.21	77.11	76.98
Other States	36.11	49.94	65.17	85.94	91.37
Total for the Indian Union	482.18	509.57	614.52	713.00	730.76

(The above information relates to 28 industries only.)

228. From the above figures it would be observed that the increase in 1952 over 1948 was 51 per cent in Bombay, 23 per cent in West Bengal, 53 per cent in Bihar and Madras and only 21 per cent in U. P. Taking India as a whole the increase is about 52 per cent. It is, therefore, necessary that in the scheme of future industrialization of the State, this aspect of the question is kept in view.

229. In 1952, the productive capital employed in different industries, in the State, stood as follows :

(In lakhs of rupees)					
Sugar .. .. .	..	..	..	..	3846.06
Cotton Textile—Spinning and Weaving .. .. .	..	..	..	..	1745.37
Vegetable oils .. .. .	..	..	..	..	383.97
General Engineering and Electrical Engineering .. .. .	..	..	..	..	217.83
Chemicals .. .. .	..	..	..	..	206.06
Distilleries and Breweries .. .. .	..	..	..	..	167.28
Woollen Textiles .. .. .	..	..	..	..	152.68
Tanning .. .. .	..	..	..	..	128.52
Paper and Paper-board .. .. .	..	..	..	..	120.76
Iron and Steel .. .. .	..	..	..	..	104.86
Glass and Glassware .. .. .	..	..	..	..	92.47
Wheat flour .. .. .	..	..	..	..	48.34
Rice Milling .. .. .	..	..	..	..	32.49
Aluminium, Copper and Brass .. .. .	..	..	..	..	28.48
Soaps .. .. .	..	..	..	..	26.21
Bicycles .. .. .	..	..	..	..	24.60
Biscuit making .. .. .	..	..	..	..	19.26
Paints and Varnishes .. .. .	..	..	..	..	16.11

230. This emphasizes the fact that for attracting fresh capital for the programme of new development, all avenues of attracting capital would have to be tapped. In Chapter VI we have envisaged a minimum investment of Rs.100 crores during the next five years for which all-out efforts will have to be made.

231. *Method of raising finance*—The Planning Commission have envisaged the following sources of finance so far as the country, as a whole is concerned :

	Per cent
(i) Loans from Industrial Finance Corporation and State Financial Corporations and Industrial Credit and Investment Corporation	6
(ii) Direct loans, indirect loans from equalization fund, and State participation by the Central Government, and participation-cum-loans by State Governments, in the share capital of private undertakings	3

			Per cent
(iii) Foreign capital including Suppliers Credit	..	..	16
(iv) New issues	..	..	13
(v) Internal resources available for investment (in new units and for replacements)	..	..	49
(vi) Other sources such as advances from managing agents, E. P. T. refunds, etc.	..	..	13
Total	..	..	100

232. Since the major portion of the development has been envisaged through private enterprise, normal methods of finance cannot be depended upon. Therefore, special efforts will have to be made to raise the necessary finances. The mechanism of control of finance is in the hands of the Central Government. But the State Government can create conditions which would attract men of initiative and enterprise to help them to achieve their objective.

233. The insufficiency of financial resources in the State can be made good by inviting entrepreneurs from outside who may be able to find necessary finances and also by taking vigorous steps to tap the locally available resources. One source of raising capital is the encashment of Zamindari Bonds. Bonds worth Rs.28.8 crores have been issued to Zamindars by the Government as compensation. Further compensation of the value of about Rs.30 crores is outstanding. In addition to this compensation, the State Government have to pay about Rs.70 crores in the shape of bonds in the next three years' time, as rehabilitation grants. Thus, on the whole, about Rs.130 crores are to be paid to the Zamindars towards compensation and rehabilitation grants. The Government should encash these bonds earlier if the money so paid is diverted to the development of new industries in the State. Zamindars, we feel, would be too willing to invest cash thus paid in the industrial development of the State. Even if a small portion of these bonds is encashed and invested in the next five years, sizeable amount could be made available for industrialization of the State.

234. Another fruitful source of capital lies in the villages. High prices of agricultural produce and the large outlay on the various schemes leading to the development of facilities for agriculture in the rural areas, have left surplus funds with the agriculturists. Entrepreneurs, therefore, should be encouraged to start factories in the districts where they can attract such surplus funds for investment in industry. In this task, the local administrative machinery of the Government should also help by propaganda and other means. They should explain, to the local population, the advantages that would accrue by the establishment of new industries and persuade them to invest their funds in industry.

235. Another source of raising funds is through financial corporations set up both by the Central and State Governments. Such institutions are the Industrial Credit and Investment Corporation, Industrial Finance Corporation and the U. P. Financial Corporation. The Planning Commission has estimated that loans amounting to Rs.40 crores would be sanctioned by the Industrial Finance Corporation, State Financial Corporations and Industrial Credit and Investment Co-operation during the Plan period.

236. The Industrial Finance Corporation of India has been providing medium and long-term credits to public limited industrial concerns, particularly in circumstances where normal banking accommodation was inappropriate or recourse to capital issue methods was impracticable. During the period 1948-49 to 1954-55 loans amounting to Rs.1,30,60,000 were sanctioned to eleven units in U. P. in different industries.

237. During the same period, loans sanctioned to industries in other States stood as detailed below :

				In lakhs of rupees
Bombay	..	..	..	897.90
West Bengal	..	..	..	388.50
Bihar	..	..	..	299.00
Madras	..	..	..	232.50
Orissa	..	..	..	174.00
Saurashtra	..	..	..	140.00
Mysore	..	..	..	120.50
Tra-Cochin	..	..	..	112.50
Punjab	..	..	..	110.50
Other States	..	..	..	201.75

Once industrial development proceeds in the State, we think better facilities might be available to the State from this source.

238. The U. P. Financial Corporation has been functioning for more than 18 months in the State with a capital of Rs.50 lacs. Loans totalling Rs.3,59,000 were advanced by 31st of March, 1956. The Corporation can render better service in promoting industrialization if the security clauses are made more liberal. It can also underwrite shares of industrial undertakings besides granting them loans.

239. It has been represented to us that the assistance from the Corporation is not effective and steps should be taken to remedy this defect. We are of opinion that this difficulty arises because the needs of industry are not properly appreciated by the Corporation whose present Board of Directors largely consist of officials who are handicapped in properly ascertaining the needs of industry.

We, therefore, recommend that there should be greater representation of trade and industry and the public on the Board so that it can effectively serve the purpose for which it is meant.

240. In the last resort if sufficient funds are not attracted, the Government itself would have to come to the aid of industry by granting loans or by subscribing to shares of individual enterprises. The types of industries we have suggested are, in most cases, medium size and finances required for any single unit would not be large except in industries like rayon. We recommend that loans by Government in deserving cases, should be given up to a limit of 50 per cent of the investment on block. Such loans should be in the form of mortgage debentures repayable in a certain number of years. In exceptional cases, the Government should be prepared to subscribe to share capital provided the entrepreneur is able to bring in substantial portion of the proposed investment.

241. We visualize that the total amount thus to be found by Government would not exceed Rs.25 crores during the period of the Second Five-Year Plan. Once industrialization gets started the amount would be repayable and the Government could then sell out their shares and utilize the proceeds to help other industries. We expect the balance of the resources under the scheme of development we have envisaged, can be found from other sources and from the entrepreneurs.

242. At present, the entrepreneurs are limited. As a result of this, ventures into new fields of activity are limited. It is necessary for the State Government to make efforts so that new entrepreneurs come into the field. This would need all the powers of persuasion and the creation of those conditions which would attract men to venture into new fields.

243. *Conclusion*—In the end we have to emphasize that the Government financial resources and their allocation obviously affect the rate and direction of economic development as a whole. The facilities for mobilizing and increasing capital and credit profoundly influence growth of industrialization. It is, therefore, necessary that the budgetary and financial policies of the Government should keep the needs of development in view.

VIII. GOVERNMENT AND INDUSTRY

244. We have now considered the present industrial position as a whole and the position and problems of the existing large-scale industries. The deficiencies and the lines of progress have been indicated. We have also examined the hindrance that stand in the way of development and have suggested the measures that should be taken to mitigate the present hardship so that the future industrial progress of the State may be ensured. Apart from the recommendations that we have made, we desire to draw the attention of the Government to the absence of certain facilities which it alone can provide.

245. *Administrative Machinery*—A suitable administrative machinery which would appreciate the needs of industry is very necessary. An industrialized State will have its own problems and it is for consideration whether an administrative machinery based on agricultural economy is suited to look after the interests of industry. At present, numerous laws pertaining to industry and labour have to be administered causing difficulties which would be accentuated when industrialization goes outside Kanpur, as is proposed, because a much larger organization would then be needed. It is, therefore, desirable to survey the position now.

246. *Organization for Large-scale Industries*—The problem of industrialization in different spheres will have to be carefully integrated and co-ordinated. Unless there is a centralized machinery to look after the different problems facing industrialization in different phases, the progress will be handicapped and the case of industry which has got its own limitations in certain spheres, would suffer. All the necessary facilities have to be provided and the prospective entrepreneur ushered in the industrial field by eliminating various hurdles which block his way. Such assistance can be in the form of providing suitable land, power connections, in securing licences from the Central Government, acquiring building material, raw material, transport and in getting available financial facilities, etc.

247. Apart from the initial formalities which have to be gone through in starting new industries, problems crop up, from time to time, in actual working. There should be some effective organization to look after the day-to-day needs of industry.

248. The State Directorate of Industries is organized into five sections : (i) Technical Education, (ii) Stores Purchase, (iii) Khadi and Village Industries, (iv) Small-scale Industries and (v) Heavy Industries, each with a senior-scale officer of the status of a Joint Director or Deputy Director under a Director of Industries who has to look after the Heavy Industries Section direct.

The Heavy Industries Section is thus not fully equipped to aid large-scale industrialization of the State. The question of strengthening the staff of the Directorate, we understand, has been under consideration by Government for some time. Considering the task that lies ahead, we recommend that a separate section for Heavy Industries, with a senior-scale officer of the status of a Joint Director should be created under the Directorate, and the existing staff of the Directorate considerably strengthened to cope with the enormous task which has been entrusted to them.

249. The section should act as a co-ordinating link between the various Government Departments like Forest, Agriculture, Animal Husbandry, Electricity, Transport, Geology and Mining, Excise, Cane, Fruit Utilization, Labour, etc., and should assess the requirements of industry and transmit them to respective departments for necessary action. Apart from this, joint meetings should be held for co-ordination of such departments.

250. One of the functions of the section should be to afford proper guidance and assistance to applicants in properly complying with the formalities connected with procurement of licences under the Industries (Development and Regulation) Act as proposed in Chapter IV.

251. *Department of Industries in the Secretariat*—The above measure, by itself, would not be able to achieve the objective in view. We, therefore, suggest that in the Department of Industries at the level of the Secretariat, there should be a consciousness of the fact that more and more industries have to be established.

252. It is also necessary that the Minister-in-charge of Industries and other Ministers should constantly keep the main aim in view. The targets aimed at should not be lost sight of and all their efforts should be co-ordinated for that purpose. The progress of industry must be constantly watched. If it is not satisfactory, investigation into the causes should be made and appropriate measures taken. Discussions with industrialists not only from within the State but also from outside on problems of industrialization, would be greatly helpful. For this purpose utmost co-ordination and co-operation of all the departments of the Government, particularly, Agriculture, Industries, Civil Supplies, Finance and Labour would be necessary.

253. *Directorate of Economics and Statistics*—In order to aid industrialization, it is necessary that detailed statistics concerning all aspects of the economy connected with industry are available in a form that will make them readily accessible to the commercial public. The collection, careful analysis and proper distribution of commercial and industrial intelligence is thus very necessary. At present, there is a Directorate of Economics and Statistics which issues a monthly Bulletin of Statistics which is far from satisfactory both from

the point of view of its being comprehensive and precise. We, therefore, recommend that the Directorate should be strengthened, if necessary; it should work in active liaison with the Director of Industries; and its monthly bulletin should contain, among other things, statistics of production of different industries, imports and exports, consumption of raw material, electricity, employment, labour statistics, etc. At present different agencies of either the Central Government or the State Government collect statistics on different subjects. The compilation of the information relating to U. P. at one place and their proper treatment for publication should not be a difficult task.

254. *Directorate of Geology and Mining*—As indicated earlier there are several areas in U. P., which have rich mineral resources. In West Bengal prospecting for oil is going on and U. P., which is in the same Gangetic Valley as West Bengal may have similar oil bearing areas. A State of the magnitude of about one-eleventh of the country as a whole could not be devoid of mineral resources. There are various kinds of minerals found on the southern border of the State. Lack of geological survey, however, has so far impeded progress and gives the erroneous impression that U. P. has no mineral resources. It is necessary that the quantity and quality of these deposits should be proved. Unless this is done, not much commercial success can be expected.

255. We understand that, at present, the State Government have a small Directorate of Geology and Mining headed by an Honorary Director. We consider that such a Department would be unequal to the task we have envisaged above. We, therefore, recommend that the State Government should take a decision about a complete survey of the entire area within a maximum period of five years and with that objective in view should create a strong Directorate of Geology and Mining manned by suitable and full time staff.

256. *Appointment of a Business Advisory Committee*—The proposals for industrial development contained in this Report would create problems of importance which, in each case, would necessitate the constant attention of the Government for investigation and solution. We, therefore, consider that a machinery should be created whereby the problems of industry are regularly brought to the notice of the Government. For this purpose, we recommend that a Business Advisory Committee should be constituted consisting of five representatives, one each from Cotton Textiles, Sugar, Oil and Chemical and Engineering Industries and a President of a Chamber of Commerce in the State, presided over by the Minister-in-charge of Industries. Later on, as more industries develop, one representative of each important industry should be added to the Committee but, in no case, the number should exceed ten including the Chairman. The Committee should meet at regular intervals preferably once a month. The function of the Committee will be to devise ways and means for

the development of new industries, to study the problems of existing industries relating to production, marketing, supply of controlled raw materials, etc. and to initiate such other actions which would promote industrialization.

257. *Representation on Committees appointed by the Central Government*—It was brought to our notice that trade and industry in U. P. at present did not get proper representation on various Committees and Boards constituted by the Central Government to deal with economic matters. Some of these are the Central Advisory Council for industries, the Import and Export Advisory Councils, and development councils and *ad hoc* committees. We are aware of the fact that representation on these bodies is not based upon any regional considerations. We, however, feel that such a State as U. P. may be represented in suitable committees. We suggest that the State Government should keep this point in view.

258. *Improvement of Crops*—It has already been brought out that both quality and yield of some of the cash crops like Sugarcane, Cotton, Jute and Oilseeds, deserve considerable improvement. If the cost of production has to be reduced as to enable the different industries to stand in competition with their counterparts in other States, adequate attention will have to be paid in improving the quality of all the cash crops. It is also necessary that adequate steps are taken to improve the yield of various crops per acre. We, therefore, recommend that there should be a Government Agricultural Farm in every district the activities of which should be to carry out experiments on improved varieties of various cash crops and then popularize them on a mass scale among the growers. On the one hand, this will fetch more money for the cultivators, on the other, the position of various industrial raw materials both in quantity and quality would improve.

259. *Irrigation Facilities*—The Government Experimental Farms as envisaged in the foregoing paragraph cannot materially improve the existing position, in the magnitude, as desired, unless existing irrigation facilities are improved. The position is more acute in the eastern parts of the State where the number of tube-wells and canals is insufficient for the requirement. Where tube-wells have been provided, the results have been encouraging resulting in much higher yield per acre. We recommend that minor irrigation works like tube-wells should be expedited in those areas where cash crops are extensively grown. Simultaneously water rate should be brought down to a reasonable level so that the cost of irrigation is economic.

260. *Method of meeting losses in Government Revenues*—We now proceed to examine the question of losses in Government revenues which would arise out of implementation of the recommendations which we have made in this Report and to suggest as to how revenues can be raised, to bridge this gap.

261. The proposals for relief which we have made in the Report relate to modification of certain taxes. The first proposal relates to the single-point sales tax system with the provision that raw materials and other processed articles which are consumed in industry should be exempted. We find that the turn-over and the amount of tax realized, during the last two years, have been as follows :

				(Rupees in crores)			
				1953-54		1954-55	
				Turn-over in crores of rupees	Tax realized	Turn-over in crores of rupees	Tax realized
Single -point	..	..	..	105.68	3.18	114.81	3.44
Multiple-point	..	..	..	116.69	1.82	122.95	1.92
Total				222.37	5.00	237.76	5.36

262. From the above figures, it would be observed that the total turn-over in 1954-55 was Rs.237.76 crores. Assuming that the multiple-point turn-over to the extent of 50 per cent has entered twice, we find that the total turn-over, on the basis of a single-point, would come to about Rs.176.28 crores. The value of raw materials consumed, according to the trend disclosed by the figures of Census of Manufactures, is about Rs.82 crores. In this figure, the value of such articles as sugarcane, etc. which are not at all taxed is also included. This, we estimate at about Rs.45 crores. Thus the value of raw materials which will seek exemption comes to about Rs.37 crores. To this may be added another Rs.15 crores approximately for raw materials estimated to be consumed by cottage and small-scale industries which are taxed at present but will have to be exempted. Thus the value of raw materials envisaged to be exempted from sales tax comes to about Rs.52 crores. The total turn-over which would be subject to sales-tax would, therefore, come to about Rs.124 crores. This means an average taxable expenditure of Rs.20 per head per year. We consider that once this system of registration and single-point tax are introduced and collection machinery improved, the taxable turn-over would come to about Rs.300 crores. If our suggestion for a single-point tax at the rate of nine pies per rupee is accepted, the yield from the Sales Tax would come to about Rs.14 crores which is higher than the anticipated revenue in the budget of the current year. Our findings indicate that if the new sales-tax increase is not abandoned, it would do harm to trade and industry of the State which would ultimately affect the revenues of the Government.

263. Another suggestion we have made is in respect of the sugarcane cess and the Co-operative Societies Commission. In the first year, based upon the consumption of sugarcane for 1954-55 season, according to our recommendations,

the total loss in the first year would come to about Rs.79.5 lakhs, in the second year about Rs.159 lakhs, Rs.238.5 lakhs in the third year and Rs.278.25 lakhs in the fourth year. The total loss in the next four years would thus come to about Rs.7.55 crores or Rs.1.89 crores per year, on an average.

264. Our recommendation in regard to Motor Vehicle Taxation involves a loss of about Rs.87 lakhs.

265. We have also recommended abolition of the electricity duty on industrial energy. According to 1954 figures, consumption of energy by industries is a little over 50 per cent. of the total. Thus, the loss on this score would be about Rs.45 lakhs, as the anticipated revenue, in the budget, from this source is Rs.80 lakhs.

266. In respect of local taxes, we do not think there would be any major loss as the terminal tax proposed by us can be so fixed that its yield remains almost equal to the revenues realized now from all the sources combined.

267. Thus, the annual loss in revenue would be as under :

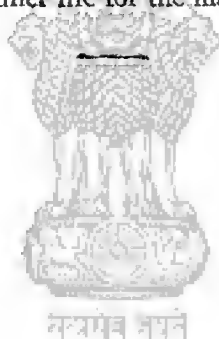
					Ruppes in crores
Sales-tax	..	..	..	..	Nil.
Sugarcane cess (Average in the next four years)	..	..	..	..	1.89
Motor Vehicle Tax	..	..	..	..	.87
Electricity Duty	..	..	..	..	.45
Total					3.21 or say 3.25 crores.

The proposal for the adjustment of electricity rates would not seriously affect Government revenues as, firstly, a number of power stations are owned by private enterprise and secondly the development of new industries would greatly contribute towards larger consumption of electrical energy. The loss estimated above would be partially offset by increased production of sugar as recommended by us which would mean larger consumption of sugarcane on which the Government would get cess from year to year at the then prevailing rates. When the additional capacity is fully realized, say at the end of the Plan, the Government would get about Rs.1.7 crores at the rate of two annas per maund of sugarcane.

268. The loss of about Rs.3.25 crores is negligible considered in the background of the benefits that would accrue as a result of large-scale industrial development. However, in order that development schemes are not hindered, we venture to suggest that necessary funds to replace this loss can be made good

by borrowings. During the War, Government had devised a scheme for raising funds by a deduction in the price of sugarcane paid to cane growers. Under the present-day circumstances, we consider the scheme may be revived with advantage. Government should issue bonds to the cane growers and utilize the proceeds to meet the deficit indicated above. At the rate of, say, two annas per maund of sugarcane crushed by sugar factories, about Rs.3.75 crores per annum can be collected in such loans.

269. *Conclusion*—In the foregoing paragraphs we have made certain suggestions for improvement in the existing Government machinery at different levels. In bringing out the existing difficulties we should not be understood as being critical of the present position. In making our recommendations we have been actuated solely with the desire that the existing industrial structure of the State is placed on a sound footing and prepared for better development in the future. Nor should it be regarded that the list of our suggestions and recommendations is by any means exhaustive. If persistent efforts are made to achieve the aim, other difficulties would be automatically solved. Industries when developed would, no doubt, lend a helping hand to the Government in the attainment of better and fuller life for the masses.



IX. PROBLEMS OF CLOSED FACTORIES

270. The Government as per office memorandum no. 1379 E. P./XVIII-B-107-H/55, dated the 31st March, 1956, desired the Committee to examine the ways and means and make recommendations to Government as to how the factories now lying closed in Uttar Pradesh could be started again.

271. *General*—It has been a difficult task to get a complete list of closed factories. Our Sub-Committee requested the District Magistrates to send a list of closed factories in their districts wherein more than 50 persons were employed before closure. The list of such closed factories is appended to the Report. We are of opinion that further on-the-spot enquiry through the Factory Inspectors is necessary in order to make this list exhaustive and authentic.

272. *Sugar Industry*—At present the following four sugar factories and three refineries are lying idle in the State :

Sugar Mills

- (1) Noori Sugar Mills, Bhatni, district Deoria.
- (2) Shri Krishan Desi Sugar Mills, Jhusi (Allahabad).
- (3) Deoria Sindhi Sugar Works, Deoria.
- (4) Sardar Sugar Factory, Ramchandari, P. O. Nichlaur, district Gorakhpur.

Refineries

- (1) Baijnath Balmukund Sugar Mills, Kanpur.
- (2) Tribeni Desi Sugar Works, Naini.

273. In case of some of these factories there is litigation among the partners or there are financial difficulties. We are of opinion that the measures suggested in regard to the shifting of some of the factories from some districts to more suitable sites would be able to rehabilitate some of them. We accordingly recommend that the facilities which are proposed to be rendered to factories already running should be extended to the closed factories as well in case they decide to shift. In so far as the refineries are concerned, it appears that there is no hope of their re-starting.

274. *Oil Industry*—A rapid survey of the closed oil mills in important oil producing areas of the State indicates that about 75 oil mills are closed with a total crushing capacity of 69 lakh mds. of oilseeds per annum and with a total capital investment of about Rs.82 lakhs, Rs.46 lakhs being for machinery and Rs.36 lakhs for buildings. If the closed mills at other places were also taken into consideration, it is estimated that the closed factories would account for a

capital investment of Rs.1.25 crores and a crushing capacity of 80 lakh mds. of oilseeds per year. About 2,700 *ghanis* and 150 expellers are lying idle.

275. After having considered all the aspects of the question brought out by the Sub-Committee, we are of opinion that the measures suggested by us in the main Report would be able to rehabilitate a number of closed oil mills. We, therefore, recommend that after the recommendations we have made in the main body of the Report have been implemented, their effect should be watched for a period of two years.

276. *Cotton Industry*—At present there are 9 cotton mills with a spindlage of about 1 lakh and loomage of about 1,300, closed in the State. The cause of closure, in general, is uneconomic working.

277. The representatives of the following six factories appeared before the Sub-Committee :

- (1) Messrs. Vijay Cotton Mills (Private) Ltd., Hathras.
- (2) Messrs. Ramchand Spinning and Weaving Mills, Hathras.
- (3) Messrs. Kanauj Dyeing and Weaving Mills, Kanrauj.
- (4) Messrs. Moradabad Spinning and Weaving Mills Co. Ltd., Moradabad.
- (5) Messrs. Lalla Mal Hardeodas, Hathras.
- (6) Messrs. Kakomi Mills, Kanpur.

The proprietors of Messrs. Kakomi Mills have dismantled the machinery and have no plans for starting it again. Messrs. Moradabad Spinning and Weaving Mills, Moradabad, were closed as a result of labour troubles. Messrs. Ramchand Spinning and Weaving Mills, Hathras, require financial assistance. Messrs. Kanauj Dyeing and Weaving Mills require permission to work all their power looms and assistance in the matter of supply of coal. Messrs. Lalla Mal Hardeodas, Hathras, is in liquidation.

278. We are of opinion that the general measures suggested in the main body of the Report would be able to remove a number of difficulties standing in their way.

279. *Miscellaneous Industries*—A number of other industries like chemicals, starch, glass and cotton waste are also either closed or working partially. The Committee has not been able to consider individual cases.

280. *Conclusions*—Government should render assistance only where they are satisfied that the re-starting of a particular factory is essential and that it would be more advantageous than the establishment of a new industry with the amount of assistance needed to re-start a particular unit.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

281. On the basis of our findings, we have made several recommendations in earlier Chapters of the Report with a view to having favourable conditions for rapid industrial development of the State. These recommendations fall into interlinked groups and if any one recommendation, from such a group, is singled out for implementation to the exclusion of the others, we fear it may upset the balance that we have attempted to achieve.

CHAPTER I

1. The State has a number of natural resources and a market. Nevertheless, industrially it has remained comparatively backward. (Paragraph 1.)

2. The nearest point in the State is at a distance of about 250 miles from coal mines and about 300 miles from steel producing areas. (Paragraph 2.)

3. Of the total population of the State, about 87 per cent lives in the rural areas and the remaining in urban areas. (Paragraph 2.)

4. About 74 per cent of the population is dependent upon agriculture and a very minor percentage on production and still less upon transport as compared to Bombay and West Bengal. (Paragraphs 7-11.)

5. The State has a number of agricultural resources. (Paragraphs 13-15.)

The mineral resources of the State have not so far been fully surveyed. (Paragraph 16.)

6. The total area under forest is 13,410 sq. miles. The chief forest products are timber, fuel, bamboos, baib grass, pine and deodar, resin, katha and lac, etc. (Paragraph 17.)

7. The principal sources of power in the State are coal obtained from Jharia and Ranigunj coal-fields and electricity both thermal and hydel generated in the State. The installed capacity for electricity in the State as on 1st January, 1955, was 2,46,591 KW. of which 2,12,305 KW. was thermal and 34,286 hydel. The present power resources, however, are inadequate for large-scale industrialization. (Paragraph 21.)

8. At the end of the Five-Year Plan the total capacity for electric energy would stand at about 620,000 KW. (Paragraph 22.)

9. The route mileage for rail in U. P. is about 5,300 which is inadequate to meet the requirements of large-scale industrial development. (Paragraph 23.)

10. The total road mileage in the State is 11,430 miles (metalled) which is inadequate for the needs of the situation. (Paragraph 24.)

11. There were only 2,681 buses and 5,288 trucks on the road in 1954. The registration of buses and trucks has considerably fallen from year to year. The means of transport are inadequate. (Paragraph 24.)

12. There were only 1,572 licensed factories in the State in 1954 as against 2,842 in West Bengal (excluding mining establishments and tea plantations) and 8,027 in Bombay and 6,369 in Madras. The number of large factories employing over 50 workmen is only about 319. The licensed factories provide employment to about two lakhs of people as against eight lakhs in Bombay, six lakhs in West Bengal and three lakhs in Madras. (Paragraph 25.)

13. For several reasons, industrialization of the State on a large-scale, is urgent. (Paragraph 30.)

CHAPTER II

14. The main existing industries of the State are Cotton Textile, Sugar, Paper and Board, Oil, Vanaspati, Glass and Glass-ware, Leather, Jute and Engineering. (Paragraph 34.)

15. Taxation measures, shortage of raw materials, high wages, transport and labour problems, power deficiencies and scarcity of capital, are problems of outstanding importance of the existing industries.

CHAPTER III

16. An atmosphere conducive to large-scale efforts, initiative and trust is necessary for making progress. (Paragraph 91.)

17. Labour's responsibility in the task of national planning is great and, therefore, it is necessary that strict discipline is maintained and activities like go-slow and strikes are avoided. (Paragraph 97.)

18. Industrialists should look ahead of times and act with foresight. By allowing increasing facilities to labour whose contribution to industrial growth is of no less importance, they would be able to create public confidence and respect. (Paragraph 99.)

19. Government should mete out justice and fairness to both management and labour. (Paragraph 100.)

CHAPTER IV

20. Intensive and extensive survey of different mineral bearing areas of the State should be carried out so that the mineral wealth may be exploited for future industrialization of the State. (Paragraph 104.)

21. The recent change in price fixation policy of Iron and Steel, resulting in uniformity of their prices throughout India will offer scope for development of Engineering and allied industries in the State. (Paragraph 105.)

22. Greater facilities for scientific and technical training should be provided to meet the growing demand for technical labour and experts. (Paragraph 110.)

23. Adequate power should be provided and at least 5,000 KW. spare capacity should be available in each district. The occasional break-downs in electricity should be avoided. (Paragraph 112.)

24. An autonomous Electricity Board should be created under the law for the development of electric power, its distribution and other connected matters. Substantial representation on such a Board should come from businessmen and industrialists. (Paragraph 113.)

25. The southern regions of the State should be opened up by railways at three or four places at every 100 miles. Further the Rihand Dam area should be directly linked to Katni area which is full of mineral deposits. Government should have a representative on the Wagon Allotment Committee of the Assam Rail Link. (Paragraphs 116-117.)

26. Relief should be provided to sugar industry by lowering freight rates on sugarcane. Similarly the case of the cotton textile industry for adjustment of freight burden both on cotton and piece-goods should be looked into. (Paragraph 118.)

27. Road permits should be freely issued and for long periods and inter-regional traffic encouraged and the terms on which permits are granted to private operators should be liberalized and high taxation avoided. (Paragraph 119.)

28. The hill regions of the north should be opened up by roads both vertically and horizontally to make the forest areas accessible. Tourists traffic should be developed by providing more hotels and rest houses. For transport of goods, construction of aerial rope-ways should be examined. (Paragraph 120.)

29. The areas surrounding the sugar mills should be well served with metalled roads. (Paragraph 121.)

30. River transport system should be developed by proper dredging of principal rivers. (Paragraph 122.)

31. Industrial housing should be provided for workers by the Government. (Paragraph 123.)

32. Long-term leases for forest exploitation should be granted. (Paragraph 124.)

33. The State Government should develop suitable locations for the development of chemical and heavy engineering industries where plenty of water-supply should be ensured. A suitable legislation should be enacted for regulating factory effluent discharge into rivers. (Paragraphs 126-127.)

34. The Directorate of Industries should have a separate Section to help in complying with the formalities required under the Industries (Development and Regulation) Act. (Paragraph 128.)

CHAPTER V

35. Main hindrances to proper development are taxation measures and labour policy. (Paragraph 130.)

36. Government should rationalize its tax structure and simplify its administration. (Paragraph 132.)

37. A single-point sales-tax on the last stage of sale should be adopted and all the industrial raw materials and auxiliary industrial products which enter into the manufacture of a finished product should be exempted from this levy. (Paragraphs 133-136.)

38. The existing sales-tax should be overhauled on the lines of West Bengal legislation. (Paragraph 137.)

39. The Government should aim at gradual reduction of the sugarcane cess so that only a small charge is retained for development needs. The reduction in the tax should be phased over a period of four years and ultimately brought down to two annas per maund of sugarcane, out of which one and half anna per maund should be spent on the development of the industry and half an anna should be utilized for co-operative societies as their commission. (Paragraphs 135-142.)

40. The cess should be realized at the time of lifting of sugar from factory premises and not when sugarcane enters factory gate as at present. (Paragraph 143.)

41. The duty on electric energy for industrial purposes should be abolished and electric charges should be brought at par with the rates obtaining in other States. (Paragraphs 144–149.)

42. The motor vehicles taxation should be modified in the light of the recommendations made by the Motor Vehicle Taxation Enquiry Committee. (Paragraph 150.)

43. There should be only one form of local tax, viz. terminal tax, out of existing medley of local taxes and it should be low and nearly uniform as far as possible. The cost of collection should be reduced and administration improved. (Paragraphs 151–155.)

44. For inter-regional and inter-State trade, diversional roads should be constructed so that they have not to pass through the local areas. (Paragraph 155.)

45. Some factories from the present sites should be shifted to better sites. (Paragraph 158.)

46. An Oil Development Commissioner on the lines of the Cane Development Commissioner should be appointed with overall charge of development of oilseeds crops and the oil mill industry in the State. (Paragraph 159.)

47. The State Government should introduce "AGMARK" scheme to the products of the oil industry. (Paragraph 160.)

48. Mutual negotiation and consultation in industrial relations should be fostered. There should be only one recognized trade union in a factory for purposes of joint consultation. (Paragraph 162.)

49. The competitive position of industry should be kept in view at the time of considering the question of wages and bonuses. (Paragraphs 163–166.)

50. Government labour policy, without being prejudicial should be firm. (Paragraph 167.)

51. The number of working days in factories should be brought at par with that obtaining at other industrial centres in the country. (Paragraphs 168–169.)

52. The Industrial Disputes Act (1947) of the Central Government should be applied to U. P. or the State legislation should be made comprehensive on the lines of the Central Act. (Paragraph 172.)

53. Hardships to some of the labour intensive industries, arising out of the application of the Factories Act, should be avoided by tactful handling by the Factory Inspectorate. (Paragraph 173.)

54. The State Government Purchases should be made on the basis of proper specifications. (Paragraph 174.)

CHAPTER VI

55. Both for mitigating social evils and for better balanced industrial development of the State future industrialization should be attempted at places besides Kanpur. (Paragraph 177.)

56. From the point of view of availability of resources and situation of the State, barring a few industries like ship-building which can be started only in a shipping yard, almost any kind of industry can be developed in the State. (Paragraph 180.)

57. The argument that a particular industry cannot be established at a particular place, owing to certain particular conditions is untenable. (Paragraph 181.)

58. Real industrial progress comes only when engineering industries begin to be established. (Paragraph 182.)

59. Production of fertilizer, railway equipment, anti-biotic and aero-engines which are in the Public Sector can be undertaken in the State. (Paragraphs 187-191.)

60. The State offers a suitable site for aluminium and synthetic rubber industries. The State should approach the NIDC for the establishment of these industries in the State. (Paragraph 193.)

61. The industries as mentioned in the following paragraphs should be attempted, in the immediate future, which, on an average, would mean a minimum of investment of Rs.100 crores over the next five years. (Paragraph 194.)

62. At least five lakhs of additional spindles and 12,000 looms should be established in the State during the next five years with a view to partially

augmenting supplies of cotton piece-goods for internal consumption. This would mean an investment of Rs.30 crores which would offer employment for about 50,000 people. (Paragraph 195.)

63. A woollen mill with about 20,000 spindles and 500 looms should be established in the State. The investment on this would come to about Rs.2.5 crores which would provide employment to about 3,000 workers. (Paragraph 196.)

64. A capacity of 25 tons for the production of rayon should be established in U. P. An investment of Rs.12.50 crores would be needed on this project which would give employment to about 4,000 workmen. (Paragraph 197.)

65. An additional capacity of at least five lakh tons for sugar should be aimed at. This would mean an investment of Rs.20 crores and would provide employment to about 20,000 people. In future no factory should be allowed within a radius of 50 miles of any existing factory so that cane supplies are assured to all of them. (Paragraph 198.)

66. The production of power and industrial alcohol which would provide raw material for rayon and synthetic rubber industries should be encouraged. (Paragraph 199.)

67. The expansion of the paper and board industry should be carried out to the extent of an investment of about Rs.5 crores which would offer employment to about 2,000 people. (Paragraph 201.)

68. At least one million ton capacity for cement should be established which would mean an investment of Rs.10 crores and would give employment to about 5,000 persons. (Paragraph 202.)

69. Development of engineering industries like structural fabrication, railway rolling stock, industrial machinery, machine tools, diesel engines, bicycles, power-driven pumps, transformers, electric motors, switch-gear, cables and wires, sewing machines, and electric lamps, should be fostered so as to entail an investment of Rs.10 crores which would give employment to about 15,000 people. (paragraphs 203-217.)

70. Inland water transport industry which would also lead to the manufacture of small barges should be encouraged. (Paragraph 218.)

71. Besides, a number of other industries including small tools can be started in the State. In certain cases there are positive advantages while in

others there are no definite advantages but there are no disadvantages. (Paragraph 219.)

72. In addition to opening the scope for employment of about 120,000 people, the development envisaged would give opportunity for the employment of about 15 to 20 times of this number in tertiary and other occupations. Only a pattern of development has been set. If development proceeds on the lines indicated, a great advance can be made. (Paragraphs 220-221.)

73. Development of industries as envisaged would give momentum for the establishment of new industries. (Paragraph 222.)

74. All these schemes would fructify only if Government are prepared and actually take steps to actively stimulate industrialization. (Paragraph 223.)

75. The investment of the order envisaged would need the ungrudging support of every section of the community. (Paragraph 224.)

CHAPTER VII

76. One of the primary economic deficiencies of U. P. has been the non-availability of sufficient capital. (Paragraph 225.)

77. The State has not been able to build up a sizeable money market owing to several reasons. (Paragraph 226.)

78. The rate of increase in employment of productive capital has been the lowest in U. P. during 1948-52. (Paragraphs 227-228.)

79. For attracting sufficient capital for the programme of new development, all avenues of attracting capital would have to be tapped. (Paragraph 230.)

80. Special efforts will have to be made to raise necessary finances for which the State Government should create conditions so that men of initiative and enterprise are attracted to start new industries. (Paragraph 232.)

81. Zamindari bonds might be encashed earlier if the money so paid is diverted to the development of industries. (Paragraph 233.)

82. Entrepreneurs should be encouraged to start factories in the districts where they can attract surplus funds lying in rural areas for investment in industries. (Paragraph 234.)

83. A fruitful source of finance lies in rural areas where some surplus funds are available. Industries should be started there in order to attract such funds. (Paragraph 234.)

84. Another source for raising funds is through different Financial Corporations set up by the Central and State Governments. (Paragraph 235.)

85. Better facilities might be available to the State in future, from the Industrial Finance Corporation of India. (Paragraph 237.)

86. The U. P. Financial Corporation can render better service in promoting industrialization if the security clauses are made more liberal. Besides granting loans to industries, it can also under-write shares of industrial undertakings. (Paragraph 238.)

87. There should be greater representation of trade and industry and the public on the Board of Directors of the U. P. Financial Corporation so that it can effectively serve the purpose for which it is meant. (Paragraph 239.)

88. In the last resort, the State itself would have to come to the aid of industry by granting loans or by subscribing to shares of new enterprises. Loans by Government, in deserving cases, should be given up to a limit of 50 per cent of the investment on block. Such loans should be in the form of mortgage debentures repayable in a certain number of years. In exceptional cases, the Government should be prepared to subscribe to share capital provided the entrepreneur is able to bring in substantial portion of the proposed investment. (Paragraph 240.)

89. The total amount to be found by Government for the nature of assistance described above, may not exceed Rs.25 crores during the period of the Second Five-Year Plan. (Paragraph 241.)

90. The State Government should make efforts so that new entrepreneurs come into the field. (Paragraph 242.)

CHAPTER VIII

91. A suitable administrative machinery which would appreciate the needs of industry is very necessary. (Paragraph 245.)

92. A separate section under the Directorate of Industries adequately staffed under a Joint Director of Industries to look after the needs of large-scale industries is necessary. This section should render various types of assistance to these industries. (Paragraphs 246-250.)

93. Department of Industries in the Secretariat should keep a constant watch over the progress of industrialization and the Ministers of the Government should take concerted action to promote industrialization. All Government departments should extend utmost co-operation for the purpose. (Paragraphs 251-252.)

94. The Director of Economics and Statistics should be suitably strengthened, if necessary, and its monthly Bulletin should be made more exhaustive and more precise. The Bulletin should contain useful information for the trade and industry. (Paragraph 253.)

95. A complete survey of the entire mineral bearing areas of the State should be completed within five years. For this purpose the Directorate of Geology and Mining should be suitably strengthened with full-time officers and staff. (Paragraphs 254-255.)

96. A Business Advisory Committee should be constituted consisting of five representatives, one each from Cotton Textile, Sugar, Oil and Chemical and Engineering Industries and a President of a Chamber of Commerce in the State, presided over by the Minister-in-charge of Industries. Later on as more industries develop, one representative of each important industry should be added to the Committee, but in no case, the number should exceed ten including the Chairman. The functions of the Committee would be to devise ways and means for the development of new industries, to study the problems of industries, and to initiate such actions which would promote industrialization. (Paragraph 256.)

97. The State Government should bring to the notice of the Central Government the desirability of including representatives of trade and industry in committees appointed by them to deal with economic matters. (Paragraph 257.)

98. A Government Agricultural Farm should be established in every district to carry out experiments on improved varieties of various cash crops and then popularize those varieties, on a mass scale, among the growers. Efforts should also be made to increase the yield per acre. Irrigation facilities should be sufficiently developed. (Paragraphs 258-259.)

99. We estimate that the total annual loss in Government revenues, as a result of implementation of our recommendations would be about Rs.3.25 crores. This would be partially offset by increased sugar production to the extent of 5 lakh tons. We suggest this deficit should be met by borrowings. For instance, two annas per maund of sugarcane may be deducted from the

price of sugarcane payable to the cultivators who may be given Government Bonds. This would give an yield of about Rs.9.75 crores per annum. A similar measure was adopted during the War. (Paragraphs 260—268.)

CHAPTER IX

100. It has been a difficult task to get a complete list of closed factories. A further on-the-spot enquiry by the Factory Inspectorate is necessary in order to get correct and exhaustive information on the point. (Paragraph 271.)

101. A number of mills are closed in Sugar, Oil and Cotton Textiles and a few other industries. The measures suggested for the development of existing industries would be able to rehabilitate a number of them. (Paragraphs 272—278.)

102. Government should render assistance only where they are satisfied that the re-starting of a particular factory is essential and that it would be more advantageous than the establishment of a new industry with the amount of assistance needed to re-start a particular unit. (Paragraph 280.)

B. M. BIRLA (*Chairman*).

L. P. MISRA.

B. N. DAS GUPTA.

PADAMPAT SINGHANIA.

J. K. SRIVASTAVA.

RAM RATAN GUPTA.

M. R. JAIPURIA.

R. P. NEVATIA, M.P.

K. K. BIRLA.

COL. B. H. ZAIDI, M.P.

MUNISHWAR DUTT UPADHYAY, M.P.

PARIPURNANAND, M.L.A.

DEOKINANDAN BIBHAIV, M.L.A.

BALENDU SHAH, M.L.A.

GOPI NATH DIKSHIT, M.L.A.

GURU NARAIN, M.L.C.

G. M. MODI.

RAMESHWAR PRASAD BAGLA.

SHRI PAT, I.A.S.,

Member-Secretary,

Director of Industries, Uttar Pradesh.

Note, dated August 11, 1959 by Sir Padampat Singhania

The prosperity of Uttar Pradesh in the next five years or in the next twenty-five years is mostly dependent on the power supply. 6,19,591 KW. power as mentioned in the Report, which will be available within the next five years, will be a negligible power for developing the Uttar Pradesh. Therefore, either Hydel power has to be developed or Thermal power is to be developed. Without having plenty of power, it will not be possible to develop Uttar Pradesh and bring prosperity to the State.

We have in this State the Ganges, which has plenty of water flowing, and with the continuous water-supply there is a great possibility of developing a source of power supply in Uttar Pradesh. Therefore, I would suggest a survey to be carried out by experts, and the Uttar Pradesh Government should attach all the necessary importance to it so that in the next Five-Year Plan the scheme for developing Hydel power from the Ganges river can be taken up. If a 500 ft. head dam can be built in the interior of the Himalayas, I am quite sure the power supply will be so enormous that there will be all prosperity to Uttar Pradesh.



सत्यमेव जयते

ANNEXURES



सत्यमेव जयते

ANNEXURE No. I

Statement showing the final estimates of cash crops for the year 1954-55

Serial no.	District	Estimated yield of tobacco	Estimated yield of rapeseed	Estimated yield of linseed	Estimated yield of potato	Estimated yield of ground-nut	Estimated yield of cotton	Estimated yield of Sugar-cane in terms of gur	Estimated yield of jute	Estimated yield of til	Estimated yield of castor
1	2	3	4	5	6	7	8	9	10	11	12
		(In tons)	(In tons)	(In tons)	(In tons)	(In tons)	(In bales)	(In tons)	(In bales)	(In tons)	(In tons)
1	Dehra Dun	..	6	355	5	1,897	6	27	5,502	..	130
2	Saharanpur	..	114	272	28	2,604	5,452	4,053	1,62,158	593	29
3	Muzaffarnagar	..	30	207	1	2,843	2	4,677	3,03,312	864	5
4	Meerut	..	41	649	..	11,587	2	7,350	4,05,151	111	3
5	Bulandshahr	..	116	1,063	1	13,395	8	5,478	1,44,228	..	33
6	Aligarh	..	144	2,076	..	13,179	162	3,922	39,030	..	28
7	Mathura	..	145	7,321	..	4,244	6	5,841	25,374	..	317
8	Agra	..	90	4,101	16	9,405	35	987	10,082	..	701
9	Mainpuri	..	54	1,534	..	17,089	5,140	119	15,508	..	21
10	Etah	..	672	782	..	22,641	6,780	751	19,142	..	22
11	Bareilly	..	343	211	42	7,416	8,799	157	83,218	193	2
12	Bijnor	..	1	477	13	2,702	3,067	3,634	1,45,054	311	222

ANNEXURE No. 1—(concluded)

Serial no.	District	Estimated yield of tobacco (In tons)	Estimated yield of rapeseed (In tons)	Estimated yield of linseed (In tons)	Estimated yield of potato (In tons)	Estimated yield of groundnut (In tons)	Estimated yield of cotton (In bales)	Estimated yield of sugarcane in terms of gur (In tons)	Estimated yield of jute (In bales)	Estimated yield of flax (In tons)	Estimated yield of castor (In tons)	
1	2	3	4	5	6	7	8	9	10	11	12	
13	Badaun	..	136	275	1	8,537	12,755	402	34,473	494	2	1
14	Moradabad	..	14	88	14	13,162	6,388	2,003	1,27,287	..	3	..
15	Shahjshampur	..	131	72	65	11,886	248	33	73,990	..	717	..
16	Pilibhit	..	49	1,832	27	4,653	63	13	69,862	2,469	204	..
17	Rampur	..	46	1,480	44	4,615	189	367	35,154	268	11	..
18	Farrukhabad	..	1,003	1,190	..	65,522	10,997	67	30,731	..	5	11
19	Etawah	..	11	3,445	1	14,683	26	423	15,280	..	7	9
20	Kanpur	..	35	5,994	11	20,327	2,266	271	11,684	..	273	178
21	Fatehpur	..	52	127	132	9,125	13	10	13,445	..	212	174
22	Allahabad	..	147	139	1,996	27,593	3	11	9,843	..	97	19
23	Jhansi	..	119	406	922	2,619	3	121	904	..	2,472	26
24	Jalaun	..	9	451	1,894	1,230	5	1	2,452	..	450	188
25	Hamirpur	..	72	35	2,789	94	10	14	3,230	..	6,212	556
26	Banda	..	48	46	2,412	466	17	10	337	..	2,025	223
27	Varanasi	..	10	10	61	25,134	1	..	39,823	99	26	..

28	Mirzapur	..	17	805	4,212	4,630	1	18	5,088	..	903	5
29	Jaunpur	..	147	13	22	40,958	3	3	33,049	..	2	..
30	Ghazipur	..	10	36	86	10,967	14	..	26,679	514	2	..
31	Ballia	..	25	147	13	11,218	3	5	33,818	2,242	..	1
32	Gorakhpur	..	8	1,231	986	21,119	2,161	..	46,825	665	396	6
33	Deoria	..	8	193	206	10,801	101	6	1,46,748	5,015	147	..
34	Basti	..	3	1,484	777	26,158	278	..	68,336	1,493	185	30
35	Azamgarh	..	32	61	151	22,776	41	..	96,344	1,203	1	..
36	Naini Tal	..	34	4,257	154	1,750	19	209	27,882	1,736	15	12
37	Lucknow	..	65	44	11	13,323	4,197	2	4,864	..	11	..
38	Unao	..	69	95	2	11,876	11,573	2	11,181	..	72	11
39	Rae Bareilly	..	58	199	11	6,369	2,247	1	5,506	..	57	..
40	Sitapur	..	630	413	217	8,597	18,318	..	1,03,378	12,302	33	2
41	Hardoi	..	114	303	28	26,845	23,413	4	57,372	..	5	9
42	Kheri	..	111	1,857	63	10,899	2,531	15	1,31,342	27,977	215	8
43	Faizabad	..	78	45	83	18,222	216	..	52,742	1,584	1	..
44	Gonda	..	5	3,737	2,311	18,858	116	2	56,361	1,475	160	1
45	Bahraich	..	100	5,510	999	7,080	1,123	1	7,462	5,955	190	..
46	Sultanpur	..	35	9	30	14,828	8	..	26,192	..	..	..
47	Pratapgarh	..	50	35	45	11,041	..	..	15,938	132	17	..
48	Bara Banki	..	159	192	58	11,010	1,120	7	51,522	2,563	5	..
Total		..	5,396	55,304	20,940	6,21,973	1,29,926	41,017	28,34,883	70,258	16,646	1,480

ANNEXURE No. 2

MINERAL RESOURCES OF UTTAR PRADESH

1. *Alum.*

District—Naini Tal.

Locality—Khairna.

Remarks—It is reported from the above locality. No details are available.

2. *Asbestos*

District—Garhwal.

Locality—(a) Kandhara ($30^{\circ}20' : 79^{\circ}5'$)

(b) Jalai ($30^{\circ}27' : 79^{\circ}5'$)

Anthophyllitic asbestos has been reported in workable quantities from the above-mentioned area.

3. *Clays*

District—Banda.

Locality—(a) Tikaria—Shrinkage 7.30 per cent against 4 per cent of Raj Mahal. 6 per cent residue over 200 mesh.

(b) Kusumi.

(c) Phatak Shila.

Clay deposits have been reported from the above places.

The clay deposits at Tikaria are present in village Lakhaupir about 5 miles south of Tikaria Railway Station. China clay is present as a lenticular deposit over-lying Upper Rewah Sandstone. The clay is white, plastic and was found to develop white colour when burnt. The estimated reserve is 4.5 thousand tons. They are worked by Mr. Har Lal Bansal of Jaitwara at present. A smaller deposit of similar nature is present near village Kusumi about 6 miles west of Tikaria. The China clay here is exactly like that of Tikaria. The estimated reserve here is about 2.5 thousand tons. An inferior quality clay of smaller nature is present at Phatak Shila.

District—Mirzapur.

Locality—(a) Bansi.

(b) Makhrikhoh.

Barkar clays are present at both the places. The deposit is extensive. Its suitability is being examined.

Locality—(c) Bairpan.

(d) Koldomri.

(e) Kathawali.

Small deposits of China clays are present at these places.

4. *Coal*

District—Mirzapur.

Locality—Kota ($24^{\circ}6' : 82^{\circ}42'30''$).

Part of Singrauli coal field extends in this district. Dr. F. Ahmad has calculated the reserve of coal as 2,000,000 tons in this area. A second class colliery can be established with production of 100 tons per day.

5. *Copper*

District—Garhwal.

Locality—(a) Kunet ($30^{\circ}2' : 78^{\circ}6'$).

(b) Kaproli ($30^{\circ}18' : 78^{\circ}44'30''$).

(c) Bagooi ($30^{\circ}34' : 78^{\circ}32'$).

(d) Agrorah ($30^{\circ}3' : 78^{\circ}47'$).

(e) Dhanpur ($30^{\circ}14' : 79^{\circ}6'$).

Other localities from Garhwal District are :

(a) Asena ($30^{\circ}22' 40'' : 78^{\circ} 36'20''$).

(b) Koti ($30^{\circ}22' 40'' : 78^{\circ} 20'$).

(c) Dagar ($30^{\circ}21' 30'' : 78^{\circ}43' 20''$).

Remarks—According to Kedar Narain copper at Pokhari is most promising. Danda Khan and Khandhara deserves further attention. The entire length of the belt is 70 miles of which 25 miles were seen by him. Cu. 2.66 per cent over 24 inches and 1.15 per cent over 24 inches at Asena.

6. *Diamond*

District—Banda.

Locality—(Markundi).

Remarks—Conglomerate belonging to Upper Vindhya has been reported. Results are awaited.

7. *Glass Sands*

District—Allahabad.

Locality—(a) Bargarh.

(b) Looghra.

(c) Shankargarh.

The sands belonging to Vindhyan quartzites are present here and they are found quite suitable for glass manufacture and are being utilized by Naini Glass Works, Allahabad.

District—Varanasi.

Similar sands are present in Chakia.

District—Dehra Dun.

Locality—Rajpur.

Good amount of glass sand is present in the area exposed in Bindhal Rao Nala, easily transportable to the railhead only 7 miles. The manufacture for bottling and other glass is recommended. Detailed analysis of this area is in progress. From some of the bands clear white glass can be made.

8. Graphite

District—Almora.

Locality—(a) Duri (29°12' 40" : 80°4' 50").

(b) Uttakot (29°24' 40" : 80°3' 30").

(c) Chira (29°28' 45" : 80°6' 20").

Small quantities of graphite has been reported from these places.

(Ref. Rec. G. S. I., Vol. 83 page 123–124.)

Cu. 96 per cent over 18 inches at Kharkot.

Sari Area—(30°18' : 79°9'). Incrustations of malachite. Opening of adit necessary.

Pokhari Area—(30° 21' : 79° 12').

Number of adits at Pokhari and Chamethi village. Adit at Raj Khan accessible. A malachite and azurite incrustations at Ooli Village.

*Danda Khan—*Eleven old adits in one furlong square. Adit 3 and 10 are promising. Malachite and azurite incrustations common. Drilling in the area indicated.

*Remarks—*No estimate can be given without drithly. Detection work is in progress.

District—Almora.

Copper is reported at number of places in Almora Districts. Following localities were examined by Directorate :

Locality—(a) Dhirauli (29°52' : 79°47½').

(b) Thela Patan (29°48' : 79°47').

(c) Dhungi Dhar (Reserve Forest) (29°48' 20" : 79°47').

(d) Tama Khani (29°53½' : 79°46½').

Incrustations of malachite were found in the abovementioned places. Quartz being bearing chacopyrite were located at Dhirauli and Dhungi Dhar.

District—Garhwal.

*Locality—*Mansari (29°58' : 79°9').

Graphite has been reported from this associated with shcists, a careful search may reveal good deposits.

(Ref. Rec. G. S. I., Vol. 83, paragraph 124.)

9. Gypsum

District—Tehri-Garhwal.

Locality—(a) Rishikesh (i) Phaul Sot—Three miles from Rishikesh Railway station.

(b) Nir Gad—Four miles from Rishikesh railway station Kirti Nagar Road.

Most of the gypsum here belongs to Upper Krol limestones.

Pockets of gypsum in the Nagini and Narendra Nagar are found. The gypsum is present as lenses and in sporadic masses are seen to continue up to 20 feet, while the strands can be traced up to 200 feet. The exploration is being done by Himalya Lime and Stone Co. They consider the reserve at Dhol Sot and Nir Gad as 5,000 tons :

Amount of gypsum extracted at Lachman Jhula from 1950 to 1955 is 24,091 tons.

Locality—(c) Lachman Jhula.

(d) Sera—Twelve miles from Raipur-Dehra Dun.

(e) Mahipur—Nine miles from Dehra Dun.

District—Dehra Dun.

Locality—(a) Manghara ($30^{\circ}24' : 78^{\circ}7'$) (impure variety 13,000 tons).

(b) Sahastradhara ($30^{\circ}23' : 78^{\circ}7'$).

(c) Bhatta—(Small pockets of no commercial use)

(d) Karkuli.

Pure pockets of white gypsum uneconomic.

(e) Khala Gaon.

Number of very thin bands of gypsum of little economic importance.

(f) Jharipani—Deposit of no economic importance.

District—Naini Tal.

Locality—Nihal River.

Proceeding from village Dhapla we find gypsum at number of places. At some of the places it is pure white suitable for plaster of paris. Total reserves estimated 37,437 tons.

10. Iron

District—Tehri-Garhwal.

Locality—(a) Lowagaon ($30^{\circ}14' : 78^{\circ}29'$)

(b) Bharnaun ($29^{\circ}57' : 79^{\circ}9'$)

(c) Chopra ($30^{\circ}20' : 45'' : 79^{\circ}11'$)

(d) Deur ($30^{\circ}20' : 79^{\circ}12'$)

(e) Udatoli ($30^{\circ}23' : 79^{\circ}11'$)

(f) Jalai ($30^{\circ}27' : 79^{\circ}5'$)

Iron deposits are known from these localities in forms of magnetite, and hematite, associated with quartz chlorite rock of Garhwal series. Magnetic iron ores are reported from Bhukhanda.* Two adits were seen. The smelting was done at Saramagara, S. W. of Pokhari.

District—Naini Tal.

Locality—(a) Ram Ghar.

Old working are present near village Lusgiani, Sat Bhunga and Nathua Khan. The ore is hematite quartzite associated with talcose schists. The deposits are uneconomic, however, drilling may yield some results.

(b) Kaladhungi.

(c) Dechauri.

Iron here occurs associated with sandstones or clays of tertiary age. The ferruginous clays are present in the whole area. But they are uneconomic.

Locality—(d) Khairna—Iron ores are reported from Khairna also.

District—Mirzapur.

Iron deposits have been reported from this district. Here they are associated with Bijowara.

11. Limestone

District—Mirzapur.

Locality—(a) Kairahat.

(b) Kota ($24^{\circ}27' : 83^{\circ}07'$)

Limestones belonging to Kairahat stage of Lower Vindhya are present between Rihan river in the west and Hardil Village ($24^{\circ}27' : 83^{\circ}11'$). At Kota it is estimated to support a cement factory producing 250 tons of cement per day, for 100 years. Sampling is indicated.

(c) Markundi.

At this place limestones belonging to Rohtas stage of Lower Vindhya are being worked out for Churk Cement Factory. The limestone reserve is very extensive at this place.

(d) Belwadah.

Crystalline limestones are reported from this place. The estimated reserve is about 3 million tons approximately. These deposits will be submerged after the completion of Rihand Dam.

Up to 25' calculate 360,000 tons, crystalline limestone 380,000 tons and dolomites 2,400,000 tons.

Garia. ($24^{\circ}8' : 82^{\circ}58'$)

Small deposit of marble is reported from this place.

District—Banda.

Locality—Ghauri.

Calcareous tufa of sub recent age has been found in this locality.

District—Tehri-Garhwal.

Locality—(a) Rishikesh at Lorsi (on Rishikesh-Dev Prayag motor road 15 miles from Rishikesh).

The work by Himalyan Limestone Co. will be started soon.

(b) Dhola Pani.

(c) Agra Khal.

Approachable from Narendra Nagar. Dark blue and massive limestone. No estimates are known. Quarry lease is held by Mr. Sharma in the Dhola Pani area. The distance to rail head 20 miles. Analysis is in progress.

(d) Nagnire—Some limestone bands are of good quality, less dolomatic suitable for cement.

District—Dehra Durr.

Locality—(a) Kalsi.

Silicious limestones belonging to Mandhali series occur at Kalsi. They are exposed at Madarsu and on the motor road to Chakrata. Limestones are extensive and workable. After a detailed sampling and its analysis. Purification necessary for removal of light silica.

(b) Bhatta.

Pure limestones (marble). Variety micro crystalline, jointed white. Reserves very high grade limestone 34 million tons (auden) for purposes of chemical industry.

(c) Sahastradhara.

(d) Rajpur.

*Reserves Dehra Dun District—*Limestone deposits for cement and chemicals have been traced Hati Paon to Mal Devta and from Barkot to Kal Ban.

(a) Marble at Bhatta 34 million tons.

(b) Limestone with Cao 45 to 46 per cent, Mgo 4 to 5 per cent is 254,497,100 tons. It can be utilized for cement after beneficiation.

(c) Limestone with Cao 50 to 55 per cent 146,347,400 tons. Cement grade limestone.

(d) Reserves of limestone with Cao above 55 per cent 6,481,1000 tons. Chemical industry.

Remarks—(a), (c), (d), good quality.

Daily wages—Rs.2 to Rs.2-8 per day.

Extraction—Rs.3 per ton.

Price of limestone varies from Rs.3 to Rs.15 per ton at quarry face.

Production from 1948 (50,246 tons) has gone up to 1,34,625 tons in 1955.

Beneficiation--The silicious limestone at Kalsi area required beneficiation by froth flotation process. Detailed investigations are indicated.

Limestone at Rishikesh--Sampling was done by Nautiyal. Bands are 500 feet thick, 20 feet good low magnesium limestone band 4, 10 and 11 are also good (Nagini Area).

Locality--Nagini ($30^{\circ}9' : 78^{\circ}21'$)

District--Almora.

Locality--Tanakpur--Six miles north of Bandasa ($27^{\circ}4' : 80^{\circ}7'$).

12. Magnesite

District--Almora.

Locality--(a) Tachhni ($29^{\circ}47' : 79^{\circ}51'$)

(b) Jajurali ($29^{\circ}46' : 79^{\circ}52'$)

(c) Dewaldhar ($29^{\circ}47' : 79^{\circ}45'$)

(d) Greechhina ($29^{\circ}48' : 79^{\circ}45'$)

At the abovementioned places magnesite occurs associated with dolomitic limestone and talcose material. Considerable quantity of good quality magnesite may be obtained from these deposits.

(e) Boragar ($29^{\circ}43' : 80^{\circ}03'$)

(f) Ganai ($29^{\circ}43' : 79^{\circ}57'$)

(g) Phadyari ($29^{\circ}43' : 79^{\circ}55'$)

(h) Rithat ($20^{\circ}42' : 79^{\circ}59'$)

Here also it occurs associated with dolomitic limestones and large quantities may be obtained. Large deposits of crystalline magnesite ore reported at places in Almora District where its origin is due replacement of dolomite unlike other occurrences. The estimated reserves of magnesite is 20 million tons.

13. Phosphates

District--Dehra Dun.

Locality--Midland in Mussoorie.

Shale bands of yellowish colour occur overlying the limestone below chert beds in Mussoorie. Qualitative analysis shows phosphatic contents in the Shales. Further sampling and analysis is indicated. Some of nodules indicate as high as 60 to 70 per cent of PO_4 .

14. Reh

It occurs as incrustation on the soil containing mainly sodium carbonate and sodium sulphate. Earliest attempt towards its utilization was made in 1918. Afterwards detailed investigation of Reh occurring in Meerut, Moradabad Muzaffarnagar districts were carried out by J. B. Auden and B. C. Gupta. The following estimate was given by them :

"Annual yield of Reh dust from 10 scrapings--Meerut 7,44,400, Moradabad 1,09,080 tons. Reh incrustations are reported from Meerut, Moradabad, Dehra Dun, Kanpur, Muzaffarnagar mainly."

They are found in other districts also."

ANNEXURE No. 3

REPORT ON MINERAL DEPOSITS NEAR RIHAND DAM SITE

The following minerals have been reported from Rihand Ram areas :

- (1) Calcite and crystalline limestone (for chemicals).
- (2) Limestone (for cement).
- (3) China clay.
- (4) Barkar clays.
- (5) Coal.
- (6) Road metal, etc.
- (7) Asbestos.

1. *Crystalline Limestone and calcite—*

[Ref : A note on the crystalline limestone deposits at Belwadah ($24^{\circ}12' : 82^{\circ}56'$) sheet 63 L/12 Plus 16, by D. R. S. Mehta.]

The crystalline limestone and calcite deposits occur about three miles south of Belwadah ($24^{\circ}12' : 82^{\circ}56'$) sheet 63 L/12 Plus 16. The limestone and calcite occur here as members of Archeans and are associated with a reddish massive granite.

The crystalline limestone deposits in Belwadah begin south-east of village Bigai and runs up to distance of about 2 miles to Belwadh Nala with in interruption at Kusahuwa Nala. It is present in three bands, each 150 feet thick. The outcrop is marked by low hillocks up to 50 feet in height. The limestone is both pink and white in colour and generally medium grained, but sometimes it has very coarse grained zones with calcite.

The individual bands of calcite vary from few inches to 10 and sometimes 80 feet in thickness and generally calcite lentilles are surrounded by crystalline limestone. The calcite is of both white and pink colours.

Both calcite and coarsely crystalline limestone have low percentage of magnesia while the ordinary limestone is almost dolomitic. The total reserve of calcite and coarse crystalline limestone up to a depth of 25 feet is about 3,60,000 and 3,80,000 tons respectively. The dolomitic limestone is about 2,400,000 tons.

Uses—The calcite and pure crystalline limestone is quite suitable for the manufacture of chemicals and calcium carbide. Calcite can also be used as a filler. The crystalline limestone is not sufficiently pure for use in chemical industry and can be used for manufacture of lime.

These deposits are situated near the Rihand Dam site and will be submerged under the reservoir with the completion of the dam.

2. *Limestone (cement) —*

(Ref : G. S. I. Record, Volume 82, Part 1, page 62.)

Mr. Mukti Nath investigated the Kajrahat limestone for their suitability in cement manufacture, south of Sone river near Rihand Dam.

The Kajrahat limestone extends between Rihand river in the west and Hardi village ($24^{\circ} 27' : 83^{\circ} 11'$) in the east, a distance of about 13 miles. The limestone at the base of Kajrahat Stage appears to be of better quality than that composing the upper stage, which is rather dolomitic. After analysis etc. it was concluded that limestones at Kota ($24^{\circ} 27' : 83^{\circ} 07'$) may last for over 100 years for a cement factory producing 250 tons of cement per day.

Some of the samples contain 94 to 95 per cent calcium carbonate and under three per cent silica. If a proper sampling is made band by band, it would probably be possible to get bands of pure limestone suitable for chemical lime. Mr. Mukti Nath is of the opinion that if a sufficient quantity of pure limestone is available, the deposit may be reserved by chemical lime.

Mr. Ahmad has located a deposit of marble north-west of Garia ($24^{\circ} 8' : 82^{\circ} 58'$) containing over one million tons of marble.

There is another marble deposit at Bichhi Nala ($24^{\circ} 8' : 82^{\circ} 56'$) about one and a half mile further south which can be used for making lime.

Further investigations are necessary to find out if these limestones are suitable for the manufacture of calcium carbide, calcium cyanamide, bleaching powder, caustic soda and sodium carbonate.

3. *China Clays—*

(Ref : Limestone Deposits of Son Valley, Mirzapur District by Mukti Nath.)

Mr. Mukti Nath, in his report on limestone deposits of Son Valley, Mirzapur District, has reported that the presence of Kavline deposits at the following places :

- (1) Koldomri ($24^{\circ} 12' : 82^{\circ} 51'$).
- (2) Bairpan ($24^{\circ} 12' : 82^{\circ} 56'$).
- (3) Kathowli ($24^{\circ} 10' : 83^{\circ} 08'$).

Thus deposits are not very large.

4. *Barkar Clays—*

(Ref : Limestone Deposits of the Son Valley, Mirzapur District, by Mukti Nath.)

Mr. Mukti Nath, reported the presence of Barkar clays at Bansi ($24^{\circ} 09' : 82^{\circ} 48'$) and Makhikoh ($24^{\circ} 07'$). These deposits were recently visited by the Field party of Directorate. The clay at Bansi is about 8 ft. in thickness and it is exposed up to a distance of about one mile.

The clay deposit at Makhikoh is also quite good. Here the bed is 8 to 6 ft. thick and extends up to a distance of about half a mile.

These two deposits are fairly big. The suitability of these clays for the manufacture of fire-bricks, etc. is being examined.

5. *Coal*—

(G. S. I. Record, Volume 83, Part I, page 1980.)

Coal is reported from near Kota ($24^{\circ} 6' : 82^{\circ} 42' 30''$) in Singhrauli coal-field of Mirzapur. Dr. F. Ahmad carried out drilling operations in this area. A number of bore holes were sunk, and some of them proved to be barren. Thick seams were met within holes nos. 1 and 3 and also in 4 and 7. Mr. F. Ahmad has calculated a standing reserve of 2,000,000 tons in this area. This deposit can be worked out as a second class colliery with a production of 100 tons per day.

Coal is also suspected in other holes and if this deposit extends further east a part of it will be submerged under reservoir of Rihand Dam.

It is necessary that detailed survey of the coalfield should be undertaken in conjunction with drilling and prospecting.

6. *Construction Materials*—

(Ref : G. S. I. Record, Volume 82, pages 1590, 163.)

The limestone deposit in Bicchi Nala is quite suitable for making lime.

The aggregate material required for Rihand Dam Project can be made available from Rakshi hill near Pipri ($24^{\circ} 11' : 83^{\circ}$). Mr. Kohli has suggested that only a small fraction of total aggregate material required for the project will be available from this place.

Mr. F. Ahmad has suggested that fairly big quantity of road metal can be obtained from dolomite dykes cutting across the proposed Hathinala-Pipri link road.

7. *Asbestos*—

(Ref : G. S. I. Record Volume 80, page 67.)

Asbestos has been found in veins and stringers of serpentine associated with crystalline dolomite limestone about half a mile west of Bhunswara ($24^{\circ} 7' : 82^{\circ} 58'$).

This area will be submerged under the reservoir.

ANNEXURE No. 4

NOTE ON WATER RESOURCES AND FACILITIES FOR DISCHARGE OF
FACTORY EFFLUENTS

The requirement of water for large-scale factories can be met from one of the following sources :

- (1) From State-owned canals.
- (2) By direct pumping from rivers.
- (3) From tube-wells constructed in the factory.

1. Water from canals is not sufficient for irrigation purposes and there it will not be possible to get water for factories. Second difficulty is that canals do not flow regularly except Upper Ganga, Lower Ganga, Sarda and Eastern Jamuna canals which flow throughout the year. In case of supply from canals, the factories will have to make their own arrangement for about one month in a year, when the canals close for repairs. Near Matatila and Rihand Dams water-supply will be available direct from reservoir.

2. Direct pumping from river is possible only in rivers with sufficient minimum discharge and is permissible only after irrigational requirements have been met.

3. Where construction of tube-wells is possible, they are the best means of supply of water to factories. Tube-wells can be constructed anywhere in alluvial plains.

The disposal of factory effluents can be made in one of the following ways :

- | | |
|-------|---------------------------------------|
| (i) | By discharging in State-owned canals. |
| (ii) | Ditto Ditto drains. |
| (iii) | Ditto Ditto rivers. |
| (iv) | Ditto Ditto fallow-lands. |

Discharge of effluents is not permissible into canals except in special cases where no alternative arrangement is possible on the condition that effluent is purified and disinfected. State drains are meant for flood-water and discharge of effluent is permitted in special circumstances on similar conditions as in canals.

Properly treated effluent can be discharged in bigger rivers with sufficient discharge where effluent gets diluted thoroughly. Where the water is used for supply to town water works, the discharge is not permitted within a certain distance.

After proper treatment, the effluent can be discharged on fallow-lands and used for crop irrigation.

The minimum discharge of important rivers in U. P. are shown below :

Serial no.	Name	Site	Average minimum discharge	Remarks
1	2	3	4	5
			Cusecs	
1	Ganga ..	.. Raiwala	6,000	Above the head of Upper Ganga Canal.
		Narora	2,000	Above head of Lower Ganga Canal.
2	Yamuna ..	.. Tajawala	3,000	Above heads of Western and Eastern Yamuna Canal.
		Okhla .. ..	..	Negligible.
3	Sarda ..	.. Banbassa	4,500	Above Sarda Canal Head.
4	Ken ..	.. Gangao Dam .. ..	..	Negligible.
		Bariarpur Dam .. ..	..	Do,
5	Betwa ..	.. Matatila Dam Site	100	
6	Ghaghra ..	.. Faizabad	12,000	
7	Ramganga ..	.. Kalagarh	250	At proposed Ramganga Dam Site.
8	Deoha ..	.. Nanak Sagar Dam Site (District Naini Tal).	50	
9	Banganga ..	.. Shohratgarh .. ..	..	Negligible.
10	Rapti ..	.. Birdghat (Gorakhpur)	700	
11	Kuano ..	.. Basti	200	Above the head of Kuano Pumped Canal.
12	Rihand ..	.. Rihand Dam Site (Village Pipri, District Mirzapur).	50	
13	Nayar ..	.. Nayar Dam Site	200	
14	Chuka ..	.. Sarda Sagar Dam	20	
15	Gandak ..	.. Nepal Border	8,000	Above the head of Naraini Canal.
16	Hindan ..	.. Northern Railway Bridge Crossing.	100	Above the head of Hindan Cut.
17	Sone ..	.. Chopan (District Mirzapur)	300	

ANNEXURE No. 5

Incidence of Provincial Taxes in U. P., 1954-55 Budget Estimates

Serial no.	Name of tax	Yield	Per capita
1	2	3	4
			Rs. a. p.
1	Sales Tax	5,26,00,000	0 13 3-8
2	Motor Vehicles and Petrol Tax	2,77,31,000	0 7 0-2
3	Stamp Duties	90,00,000	0 2 3-2
4	Betting Tax	4,00,000	0 0 1-2
5	Electricity Duty	80,00,000	0 2 0-3
6	Sugarcane Cess	3,50,00,000	0 8 10-3
7	Excise Duty	5,38,00,000	0 13 7-4
8	Entertainment Tax	71,00,000	0 1 9-5
9	Agricultural Income Tax	36,00,000	0 0 10-9
	Total	19,72,31,000	3 1 10-8
Taxation by Local Bodies			
1	Municipalities (1951-52)	4,30,67,000	0 10 10-8
2	District Board (1951-52)	1,53, 73,000	0 3 10-7
3	Panchayats (1952-53)	44,01,054	0 1 1-3
	Total	6,28,41,054	0 15 10-8
	GRAND TOTAL	26,00,72,054	4 1 9-6

SALES TAX IN UTTAR PRADESH

					Rs.
1950-51	..	..	..	..	4,93,00,000
1951-52	..	..	..	..	4,81,00,000
1952-53	..	..	..	..	4,46,00,000
1953-54	..	..	..	..	5,05,00,000
1954-55 Budget	..	..	..	..	5,26,00,000

RECEIPTS FROM SALES TAX

Part "A" States

						1954-55 (in crores of rupees) (Budget estimates)
Andhra	..	..	..	..	..	3.15
Assam	..	..	..	..	..	0.72
Bihar	..	..	..	..	..	2.72
Bombay	..	..	..	..	..	15.67
Madhya Pradesh	..	..	..	..	..	1.95
Madras	..	..	..	..	..	9.50
Orissa	..	..	..	..	..	1.30
Punjab	..	..	..	..	..	2.15
Uttar Pradesh	..	..	..	..	..	5.26
West Bengal	..	..	..	..	..	4.57
Total for Part "A" States						46.99

Part "B" States

Hyderabad	..	..	..	..	..	2.00
Madhya Bharat	..	..	..	..	..	1.39
Mysore	..	..	..	..	..	1.30
PEPSU	..	..	..	..	..	0.46
Saurashtra	..	..	..	..	..	0.70
Travancore-Cochin	..	..	..	..	..	2.60
Total for Part "B" States						8.45

Part "C" States

Delhi	..	..	..	..	..	1.12
Vindhya Pradesh	..	..	..	..	..	0.18
Manipur	..	..	..	..	..	0.02
Total for Part "C" States						1.32
Total for all States						56.76

Comparative Statement of Provincial and Local Taxation

(Rupees in lakhs)

Provincial Taxes			Bengal	Bombay	Madras	Punjab
1. Sales Tax	..	..	.. 457.00	1567.00	950.00	215.00
2. Motor Vehicle and Spirit Tax	..	..	.. 116.58	382.52	371.14	46.14
3. Stamp Duties	..	..	.. 160.00	273.00	294.00	32.00
4. Betting Tax	..	..	.. 62.00	119.00	16.00	..
5. Electricity Duty	..	..	.. 106.00	208.00	11.00	..
6. Tobacco Duties	..	..	.. ..	..	40.00	5.00
7. Cane Cess	..	..	.. ..	54.00	..	..
8. Excise Duty	..	..	.. 506.00	68.00	21.00	236.00
9. Entertainment Tax	..	..	.. 95.00	165.00	75.00	19.00
10. Agricultural Income Tax	..	..	.. 64.00	..	7.00	..
Local Taxes						
1. Municipality	..	..	.. 103.31	458.46	397.17	140.64
2. District Board	..	..	.. 38.94	133.00	397.89	76.12
3. Panchayats	..	..	.. 37.91	100.00	16.40	36.66
4. Corporation Tax	..	..	.. 542.50	958.80	234.5	..

नमो भगवते वासुदेवाय

ANNEXURE No. 6

Statement showing Import and Export of some important Materials into the State for year ending 31st March, 1955

Serial no.	Name of articles	Imports		Exports	
		Quantity	Source	Quantity	Source
1	2	3	4	5	6
		Mds.		Mds.	
1	Bones ..	49,393	Punjab, Delhi, Madhya Bharat and Rajasthan.	6,52,769	Bengal, Bombay, Madras, Rajasthan.
2	Cement ..	94,16,947	Bihar, Madhya Pradesh, Madhya Bharat, Rajasthan, Punjab.	52,931	Madhya Bharat, Rajasthan, Punjab, Bihar.
3	Coal and Coke ..	6,82,81,866	West Bengal, Bihar, Madhya Pradesh.	30,08,436	Hyderabad, Madhya Bharat, Rajasthan, Punjab.
4	Cotton, Twist and Yarn—				
	Foreign ..	521	Calcutta	55	
	Indian ..	1,30,424	Bombay, Madras, Calcutta, Madhya Pradesh, Delhi.	71,204	Madhya Bharat, Calcutta, Delhi, Punjab, Bihar, etc.
5	Cotton Piece-goods—				
	Foreign in Bales ..	16	Bombay, Calcutta	32	Calcutta, Bombay.
	Foreign in Box ..	3	Bombay	..	..
	Indian in Bales ..	8,09,320	Bombay, Madhya Bharat, Delhi	2,03,171	Calcutta, Bombay, Delhi, Punjab, Bihar.
	Indian in Box ..	149	Bombay	19	Madhya Bharat, Bombay.
6	Dyes and Tans ..	1,47,285	Madhya Pradesh, Madhya Bharat, Vindhya Pradesh, Bihar, Bhopal.	397	Bombay, Punjab, Bihar.
7	Glass ..	69,004	Calcutta, Bombay, Delhi, Bihar, Bengal.	4,18,562	Punjab, Delhi, Bombay, West Bengal, Hyderabad, Madras.
8	Hemp and Fibres excluding Jute	59,373	Madhya Pradesh, Vindhya Pradesh, West Bengal, Punjab, Bhopal.	2,28,765	Calcutta and Punjab.
9	Hides, Raw ..	35,426	Bihar, Punjab, Delhi, Madhya Bharat, Calcutta.	2,93,133	Madras, Calcutta, Madhya Bharat, Mysore, Rajasthan, Delhi, Punjab.
10	Skins, Raw ..	9,148	Punjab, Delhi, Bihar, Madras	51,389	Calcutta, Madras, Bombay, Delhi.
11	Hides and skins tanned and leather.	37,695	Calcutta, Bihar, Punjab, Bombay	48,593	Calcutta, Bombay, Madhya Pradesh, Punjab.
12	Jute Raw loose ..	40,593	Bihar, Bengal, Punjab	5,535	Calcutta, Punjab, Madhya Pradesh.
13	Jute Raw pucca in Bales ..	5,275	Calcutta, Bihar, Assam	29,614	Calcutta, West Bengal, Rajasthan.

ANNEXURE No. 6

Statement showing Import and Export of some important Materials into the State for year ending 31st March, 1955

Serial no.	Name of articles	Imports		Exports	
		Quantity	Source	Quantity	Source
1	2	3	4	5	6
		Mds.			
14	Gunny bags and Cloth	..	3,13,820 Calcutta, West Bengal, Bihar, Punjab, Delhi.	3,58,700	Madhya Bharat, Vindhya Pradesh, Rajasthan, Madhya Pradesh, Bombay, Punjab, Delhi.
15	Iron and Steel	..	54,30,743 West Bengal, Bihar, Bombay, Calcutta, Punjab, Delhi.	9,16,846	Calcutta, Bombay, Madhya Pradesh, Madhya Bharat, Vindhya Pradesh, Rajasthan, Bihar, Delhi.
16	Lac and Shellac	..	39,506 Madhya Pradesh, Punjab, Madras, Bombay.	12,467	Calcutta, Bombay, Rajasthan, Bihar.
17	Manganese Ore	..	552 Madhya Pradesh	..	..
18	Oil-cake Castor	..	15,145 Bombay, Hyderabad	10,358	West Bengal, Bihar, Bombay, Madhya Pradesh.
19	Oil-cake others	..	3,49,019 Punjab, Madhya Pradesh, Rajasthan, Madhya Bharat.	11,80,093	West Bengal, Bihar, Punjab, Delhi, Madras.
20	Vegetable Oils—				
	Castor	..	8,451 Bombay, Hyderabad, Madhya Pradesh.	33,291	Delhi, Punjab, Bihar, Madhya Pradesh, West Bengal.
	Coconut	..	42,340 Madras, Calcutta, Bombay	876	Assam, Delhi, Madhya Bharat.
	Groundnut	..	4,67,142 Punjab, Madhya Pradesh, Madhya Bharat, Bombay, Hyderabad.	21,571	Calcutta, Assam, Bihar, Punjab.
	Others	..	1,33,020 Punjab, Madhya Pradesh, Madhya Bharat, Bombay.	6,06,310	Assam, West Bengal, Bihar, Orissa, Punjab, Delhi.

21 Oilseeds—

Castor	..	..	11,019	Madhya Pradesh, West Bengal, Punjab.	16,345	Calcutta, Bombay.
Cotton	..	..	7,09,559	Punjab, Madhya Pradesh, Bombay, Madhya Bharat, Hyderabad.	29,947	Punjab, Rajasthan.
Groundnuts	..	..	2,57,216	Madhya Bharat, Madhya Pradesh, Bombay, Punjab, Rajasthan.	54,892	Delhi, Punjab, Madhya Pradesh.
Linseed	..	..	1,22,311	Madhya Bharat, Madhya Pradesh, Bihar.	2,74,602	Calcutta, Punjab, Bihar, Madhya Pradesh.
Rape and Mustard	..	..	5,18,793	Punjab, Rajasthan, Madhya Bharat ..	18,12,203	West Bengal, Bihar, Calcutta, Punjab, Delhi.
Til ..	..	..	64,812	Madhya Bharat, Madhya Pradesh ..	2,17,559	Punjab, Delhi, Bombay, Rajasthan, Madras.
22 Rubber Raw	..	..	1,964	Madras, Bombay ..	1	Rajasthan.
23 Sugar ..	..	..	11,04,839	Bombay, Calcutta, Madhya Pradesh, Bihar.	72,77,290	West Bengal, Bihar, Punjab, Delhi, Madhya Pradesh, Bombay, Rajasthan.
24 Khandasari Sugar	..	..	11,191	Bombay, Punjab ..	4,92,648	Punjab, Delhi, Rajasthan, Madhya Bharat.
25 Gur and Jaggery	..	..	2,41,270	Punjab, Delhi, Bombay ..	58,97,777	Calcutta, Madhya Bharat, Rajasthan, Bombay, Madhya Pradesh, Punjab, Bihar.
26 Molasses	..	..	1,56,565	Bombay, Madhya Bharat, Bihar ..	4,06,266	Calcutta, Punjab, Assam, West Bengal.
27 Tea ..	..	..	86,813	Calcutta, Delhi, Punjab ..	40,092	Madhya Pradesh, Punjab, Bombay.
28 Wood and Timber Teak	..	..	57,263	Madhya Pradesh, Bombay, Madras, Hyderabad.	3,577	Rajasthan, Bombay.
Other Timber	..	..	19,94,120	Madhya Bharat, Vindhya Pradesh, Madhya Pradesh, Punjab, Orissa, Bihar, West Bengal.	20,07,235	Bombay, Madhya Bharat, Rajasthan, Delhi, Punjab, Bihar.
Wool Raw	..	..	47,490	Calcutta Punjab, Rajasthan ..	23,896	Rajasthan, Punjab, Bihar.

ANNEXURE No. 7

*List of closed factories Industry-wise***Sugar—**

1. Messrs. Sri Krishna Desi Sugar Works, Jhusi, Allahabad.
2. Messrs. Noori Sugar Works Ltd., Bhatni, District Deoria.
3. Messrs. Sindhi Sugar Mills, Baitalpur, District Deoria.
4. Messrs. Sardar Sugar Mills, Village Ramchanderi, P. O. Nichlaul, District Gorakhpur.

Sugar Refineries—

1. Messrs. Tribeni Deshi Sugar Mills, Naini, Allahabad.
2. Messrs. Balmukand Baijnath, Kanpur.

Oil—

1. Messrs. Hindustan Oil Industries, Allahabad.
2. Messrs. Prayag Industries and Oil Mills, Bahadurganj, Allahabad.
3. Messrs. Phaphamau Oil Mills, Phaphamau, Allahabad.
4. Messrs. Rameshwar Oil Mills, Allahabad.
5. Messrs. Ganga Oil Mills, Phaphamau, Allahabad.
6. Messrs. Sita Ram Raja Ram Oil Mills, Allahabad.
7. Messrs. Ganesh Oil Mill, Allahabad.
8. Messrs. New Agarwal Oil Mills, Hammatganj, Allahabad.
9. Messrs. Banaras Product Co., Sheopur, Varanasi.
10. Messrs. Kashi Oil Mills, Varanasi.
11. Messrs. Kedia Oil Mills, Sheopur, Varanasi.
12. Messrs. Laxmi Oil Mills, Chowkaghat, Varanasi.
13. Messrs. Moti Oil Mills, Varanasi.
14. Messrs. Sri Maheshwari Oil Mills, Varanasi.
15. Messrs. Jaipuria Oil Mills, Varanasi.
16. Messrs. Vijay Oil Mills, Vidya-Pith Road, Varanasi.
17. Messrs. Badal Ram Laxmi Narain Oil Mills, Vidya-Pith, Varanasi.
18. Messrs. Banaras Produce Co., and Oil Mills, Sheopur, Varanasi.
19. Messrs. Banaras Oil Mills, Machodari Park, Varanasi.
20. Messrs. Bishambhar Oil Mills Lalitpur, Jhansi.
21. Messrs. H. K. Saraf Oil Mills, Lalitpur, Jhansi.
22. Messrs. Annapurna Rice and Oil Mills, Ataira, Banda.
23. Messrs. Upper India Oil Industries, Musran Gate, Hathras.
24. Messrs. Ganesh Industries, Gaushala Road, Hathras.

25. Messrs. Ratan Oil Mills, Musran Gate, Hathras.
26. Messrs. Ganesh Textiles, Oil Mills, Gaushala Road, Hathras.
27. Messrs. Sakseria Oil and Dal Mills and Iron, Brass Foundry, Circular Road, Hathras.
28. Messrs. Shanker Oil Mills (now the name is Satya Narain Oil Mills), Sasni Gate, Hathras.
29. Messrs. Shyam Sunder Lal Mills, Aligarh.
30. Messrs. Basant Lal Hira Lal Oil Mills, Subash Road, Aligarh.
31. Messrs. Goenka Oil Mills, College Road, Khurja.
32. Messrs. Chaturbhuj Jagdish Chandra Oil Mills, Ghaziabad.
33. Messrs. Dhuliawala Oil Mills, Deputy-ka-Parao, Kanpur.
34. Messrs. Om Cotton, Oil and Ginning Mills, Basmandi, Kanpur.
35. Messrs. Sri Krishna Oil and Ginning Mills, Deputy-ka-Parao, Kanpur.
36. Messrs. Nagrath Oil Mills, Fazalganj, Kanpur.
37. Messrs. Northern India Oil Industries Ltd., Raipurwa, Kanpur.
38. Messrs. Govt. Model Oil and Soap Factory, H. B. T. I., Kanpur.
39. Messrs. Chhotelal Jagannath Pd. Oil Mills, Bharthana, Etawah.
40. Messrs. Nihal Chand Kishore Lal, Oil Mills, Etawah.
41. Messrs. Tulsiram Mahanram Oil Mills, Etawah.
42. Messrs. Ramanand Dwarka Das Oil Mills, Shikohabad.
43. Messrs. Kamla Pat Sohanlal Oil Mills, Shikohabad.
44. Messrs. Agra Oil Mills, Etmadpur, Agra.
45. Messrs. Jain Industries Oil Mills, Etmadpur, Agra.
46. Messrs. Brindabandas Bishambharnath Oil Mills, Belanganj, Agra.
47. Messrs. Bankeylal Niranjandas Oil Mills, Bharatpur Road, Mathura.
48. Messrs. Amrit Oil and General Mills, Koshi Kalan, Mathura.
49. Messrs. Koshi Oil Mills, Koshi Kalan, Mathura.
50. Messrs. Radha Govind Oil Mills, Koshi Kalan, Mathura.
51. Messrs. Acme Oil Mills, Aishbagh, Lucknow.
52. Messrs. U. P. Oil Industries Ltd., Aishbagh, Lucknow.
53. Messrs. Rameshwar Dal and Oil Mills, Railwayganj, Hardoi.
54. Messrs. Laxmi Sugar and Oil Mills, Hardoi.
55. Messrs. Laxmi Industries, Hardoi.
56. Messrs. Victoria Oil Industries, Ltd., Civil Lines, Bareilly.
57. Messrs. Chandausi Oil Industries Ltd., Chandausi, Moradabad.
58. Messrs. Bishambharnath Oil Mills, Chandausi, Moradabad.
59. Messrs. Abdul Majeed Flour and Ice Mills, Katra, Moradabad.
60. Messrs. Ramgovind Oil and Surkhi Mills, Station Road, Moradabad.
61. Messrs. Shri Krishna Oil Mills, Galshalet, Moradabad.

62. Messrs. Rampur Industries Ltd., Rampur.
63. Messrs. Allahabad Oil Mills, Pilibhit.
64. Messrs. L. H. Sugar and Oil Mills Ltd., Pilibhit.
65. Messrs. Jyoti Swarup & Bros. Ltd., Pilibhit.
66. Messrs. Shri Sarswati Oil Mills, Baragaon, Gonda.
67. Messrs. Shri Satya Bhagwan Oil, Rice and Dal Mills, Ranibazar, Baragaon, Gonda.
68. Messrs. Sri Radhey Rice, Oil and Dal Mills, Baragaon, Gonda.
69. Messrs. Shri Oudh Rice and Oil Mills, Risia, District Bahraich.
70. Messrs. Shanker Commerce and Industries, Alinagar, Gorakhpur.
71. Messrs. Bharat Oil Mills (Private) Ltd., Ismailpur, Gorakhpur.
72. Messrs. Sarya Oil Mills, Sardarnagar, Gorakhpur.
73. Messrs. The Mahabir Oil Mills, Sahjanwa, District Gorakhpur.
74. Messrs. Hind Oil Mills or Mahabir Oil Mills, Rasra, District Ballia.
75. Messrs. Bindeshwari Oil and Foundry Mills, Barhaj Bazar, District Deoria.

Rubber—

Messrs. International Rubber Mills, Baghpa Road, Meerut City.

Cotton Ginning and Pressing—

1. Messrs. Narain Cotton Ginning and Pressing Factory, Ait, Arai.
2. Messrs. J. K. Pressing Factory, Etawah.
3. Messrs. Lallamal Hardeodas Cotton Ginning Factory, Aligarh.
4. Messrs. Seth Radha Kishan Mills, Ambala Road, Saharanpur.
5. Messrs. Gorakhram Sadhuram Ginning Mills, Hapur.
6. Messrs. Manauri Lal Ram Narain Ginning Mills, Kanauj.
7. Messrs. Kuber Cotton Ginning and Pressing Products, Dibai, Bulandshahr.
8. Messrs. Lala Nand Kishore Jagannath Ginning and Pressing Factory, Etawah.
9. Messrs. Bansidhar Radha Ballabh Mills, Shikohabad.
10. Messrs. Purshottam Das Chunnail Industries, Mursan Gate, Hathras.
11. Messrs. Rama Nand Dwarkadas, Shikohabad.

Textiles Mills—

1. Messrs. Lallamal Hardeodas Cotton and Spinning Mills, Hathras.
2. Messrs. Bhadohi Textile Industry Ltd., Varanasi.
3. Messrs. Banaras Cotton & Silk Mills Ltd., Varanasi.
4. Messrs. Benos Sericum Ltd., Durga Kund, Varanasi.
5. Messrs. Shri Vikram Cotton Mills Ltd., Tulsi Das Road, Lucknow.

6. Messrs. Moradabad Spinning and Weaving Mills Co., Ltd., Moradabad.
7. Messrs. Narayan Cotton Mills, (Bewis & Co.), Kanpur.
8. Messrs. Harikishan Das Vishnu Weaving Mills, Factory Area, Fazalganj, Kanpur.
9. Messrs. Sachendi Cotton Mills, Kanpur.
10. Messrs. Model Woollen and Silk Mills, Kanpur.
11. Messrs. Kakomi Cotton Mills, Juhi, Kanpur.

Glass Factories (except Bangle Factories) —

1. Messrs. Amrit Block Glass Works, Firozabad, Agra.
2. Messrs. Silver Glass Works Ltd., P. O. Lahartara, Varanasi.
3. Messrs. Oudh Glass Works Ltd., Sultanpur.
4. Messrs. Kamla Glass Factory, Naini, Allahabad.

Metal and Engineering—

1. Messrs. Modern Metal Industries Ltd., Rampur.
2. Messrs. Sooraj Metal and Brassware Mills, Hapur (Meerut).
3. Messrs. Associated Tube-wells Ltd., 23 A. P. Sen Road, Lucknow.
4. Messrs. Sri Ram Rolling Mills, Tal Katora Road, Lucknow.
5. Messrs. Faraday Tube-wells Construction Co., Lucknow.
6. Messrs. Oswal Rolling Mills Khatear Ply Co., Moradabad.
7. Messrs. Hind Metal Works, Latouche Road, Kanpur.
8. Messrs. Chandra Lal Jain Wire Rolling Factory, Mahabirganj, Kanpur.
9. Messrs. Agrawal Rolling Mills, Turani Tola, Mirzapur.
10. Messrs. Royal Plate Works, Roorkee.
11. Messrs. Mullick Engineering Works, Maldahia, Varanasi.
12. Messrs. Indian Chemical Laboratories and Metal Works, Varanasi.
13. Messrs. Asiatic Engineering Works, Kalpi Road, Kanpur.
14. Messrs. United Surgical Workshop, Gumti no. 2, Kanpur.
15. Messrs. J. K. Alloys Ltd., Cooperganj, Kanpur.
16. Messrs. Mahabir Engineering Works Cooperganj, Kanpur.

Pottery—

Messrs. Star Pottery Works, Belanganj, Agra.

Chemical Industry—

1. Messrs. Chemical Factory, Etmadpur, Agra.
2. Messrs. United Chemical Works, 20 Fazalganj, Factory Area, Kanpur.

Distillery—

1. Messrs. Indian Distillery, Anwarganj, Kanpur.
2. Messrs. Kanpur Sugar Mills, Gutaiya.

Scientific Apparatus—

Messrs. Scientific Apparatus and Chemical Works, Agra.

Leather Industry—

1. Messrs. Rampur Tannery and Manufacturing Co. Ltd., Rampur.
2. Messrs. Rampur Leather Industries Ltd., Kanpur.
3. Messrs. Swastic Tanneries, Jajmau, Kanpur.
4. Messrs. Eagle Tanneries, Kanpur.

Aluminium Factory—

Messrs. Shanker Aluminium Factory, Varanasi.

Cycle—

1. Messrs. Prince Carrier Works, Kabirchaura, Varanasi.
2. Messrs. Deepak Ltd., Ramnagar, Varanasi.

Match Industry—

1. Messrs. Dawn Match Co., Ltd., Rampur.
2. Messrs. Match Box Factory, Kanker Khera, Meerut.

Timber and Plywood—

1. Messrs. Rampur Timber and Turnery Co., Ltd., Rampur.
2. Messrs. Balgopal Das Plywood and Timber Industries, Saharanpur Road, Dehra Dun.

Dairy—

Messrs. Rampur Dairy and Agricultural Co., Rampur.

Hosiery—

Messrs. Ravi Hosiery and Rug Works, Sahadhra, Meerut.

Dry Ice—

1. Messrs. Spencer & Co., Ltd., Carbon Gas, Ice and Cold Storage Factory, G. T. Road, Kanpur.
2. Messrs. Banaras Ice Factory, Varanasi.
3. Messrs. Hazan Lal Ice Factory, Ghaziabad.
4. Government Dehydration Factory (Cold Storage), Farrukhabad.

Starch—

1. Messrs. Rampur Maize Products Ltd., Station Road, Rampur.
2. Messrs. Narang Industries Ltd., (Starch), P. O. Sugar Factory, Nawabganj, Gonda.
3. Messrs. Avadh Sugar Mills (Starch Section), Hargaon, District Sitapur.
4. Messrs. Pearl Products, Kanpur.

Tents—

Messrs. Dalchand & Sons, Tent Workshops, Garden Road, Meerut.

Gas—

1. Messrs. Standard Dehydrating Works, Nauchandi Ground, Meerut.
2. Messrs. Simpson Gas Plant, opposite Cold Storage, G. T. Road, Ghazipur.

Food Industries—

1. Messrs. Vita Food Products, Varanasi.
2. Messrs. Wholemeal Atta Mills, Bara Banki.

Cotton Waste—

1. Messrs. Parmanand Yashodanand, Collectorganj, Kanpur.
2. Messrs. Northern India Trading Co., Kanpur.
3. Messrs. Garg Cotton Waste Factory, Kanpur.

Bobbin Industry—

Messrs. Indian Bobbin Factory, Bareilly.

Rosin Industry—

Messrs. Bhagwan Rosin Factory, Nekpur, Bareilly.

Tobacco—

Messrs. Indian Leaf Tobacco Development Co., Ltd., Gunagarh, Saharanpur.

Paint—

Messrs. Anglo-Dutch Paint Colours Varnish Works Ltd., Mohiuddinpur, Meerut.

Miscellaneous—

1. Messrs. Allen Bery & Co., Ltd., Station Road, Lucknow.
2. Messrs. Allied Drapers, Lucknow.
3. Messrs. Kamal Bros., 154 Civil Lines, Bareilly.
4. Messrs. Buttany Corporation, Chakrata Road, Saharanpur.

ANNEXURE No. 8

List of Chamber of Commerce, Trade Associations, Individuals and closed factories from whom representations were invited by the two Sub-Committees. Those marked with an asterisk submitted Memoranda to the Sub-Committees.

I. CHAMBERS

1. Merchant's Chamber of Commerce, 13/23 Civil Lines, Kanpur.
2. Upper India Chamber of Commerce, Civil Lines, Kanpur.*
3. U. P. Chamber of Commerce, 13/27 Civil Lines, Kanpur.*
4. National Chamber of Industries and Commerce, Belanganj, Agra.*
5. Northern India Merchantile Chamber of Commerce, Lucknow.*
6. Western U. P. Chamber of Commerce, Meerut.*
7. Hapur Chamber of Commerce, Hapur.
8. Silk Merchant's Chamber of Commerce, Varanasi.

II. ASSOCIATIONS

1. Employer's Association of Northern India, 14/77 Civil Lines, Kanpur.*
2. Foundries and Engineering Works Association of Northern India, Deputy-ka-Parao, Kanpur.
3. U. P. Oil Millers Association, Collectorganj, Kanpur.*
4. Engineering Association of Northern India, c/o, S. P. Engineering, Fazalganj, Kanpur.*
5. Glass Industrial Syndicate, Ferozabad.*
6. Western U. P. Cottage and Small-scale Industries Association, Meerut.
7. Aligarh Lock Traders Association, Aligarh.*
8. Kanpur Sugar Merchants' Association, 51/57 Collectorganj, near Shakkarpatti, Kanpur.*
9. The Agra Trade Association, Agra.
10. Development Association, Agra.
11. The Agra Shoe Traders Association, Agra.
12. Bareilly Traders Association, Bareilly.
13. Khandsari Sugar Manufacturers Association, Shahmatganj, Bareilly.
14. The Banaras Industrial and Trade Association, Chowk, Varanasi.
15. Iron Merchants' Association, Kanpur.
16. Beopar Syndicate Ltd., Hapur, District Meerut.
17. Uttar Pradesh Industrial Co-operative Association, Chunniganj, Kanpur.
18. U. P. Cycle Manufacturers Co-operative Association, Ltd., Kanpur, P. B. no. 249, Kanpur.*

19. Northern India Carpets Manufacturers Association, 23 Albert Road, Allahabad.*
20. Indian Carpets Manufacturers Association, Mirzapur.
21. Shellac Manufacturing Association, Mirzapur.*
22. Sports Goods Manufacturers Federation, Meerut.
23. Tea Planters Association, Dehra Dun.
24. U. P. Pharmaceutical Manufacturing Association, c/o Vitamin Labs of India Ltd., Aishbagh, Lucknow.
25. Hide Merchants' Association, Kanpur.
26. Moradabad Iron and Hardware Merchant's Association, Moradabad.
27. Indian Bristle Merchants' Association, Mahatma Gandhi Marg, Kanpur.
28. Meerut Iron Factories Association, c/o Meerut Engineering Works, Delhi Octroi, Post Meerut.
29. Indian Sugar Mills Association, Basant Nivas, 2 Kabir Marg, Lucknow.*
30. The Food Industries Association of Northern U. P., Bahraich.

III. INDIVIDUALS

1. Sri Padampat Singhania, Kamla Tower, Kanpur.
2. Sri Robert Menzies, B. I. C. Ltd., Kanpur.
3. Sri Rani Ratan Gupta, Laxmiratan Cotton Mills Co., Ltd., Kanpur.
4. Sri Pearey Lal Singhania, J. K. Cotton Manufacturers Ltd., Kanpur.
5. Sri J. K. Srivastava, New Victoria Mills Ltd., Kanpur.
6. Sri Rameshwar Prasad Bagla, Muir Mills Ltd., Kanpur.
7. Sri Mangtu Ram Jaipuria, Swadeshi Cotton Mills Ltd., Kanpur.
8. Sri Sita Ram Jaipuria, Swadeshi Cotton Mills Ltd., Kanpur.
9. Sri W. H. J. Christie, Elgin Mills Ltd., Kanpur.
10. Sri R. L. Powell, B. I. C. Ltd., Kanpur.*
11. Sri Ram Narain Garg, Civil Lines, Kanpur.
12. Sri H. G. Misra, Misra Hosiery Mills, Kanpur.
13. Sri Purshotam Dass Singhania, J. K. Jute Mills Ltd., Kanpur.
14. Sri Hari Shanker Bagla, Maheshwari Devi Jute Mills Ltd., Kanpur.
15. Sri A. L. Cooke, Cooper Allen, Kanpur.
16. Sri B. K. Banerji, Kanpur Tanneries Ltd., Kanpur.
17. Sri S. M. Bashir, J K Iron and Steel Co., Ltd., Kanpur.
18. Sri Inder Singh, Singh Engineering Works Ltd., Kanpur.
19. Sri Shanti Narain Chadda, Pukka Hosiery Mills, Kanpur.
20. Sri B. West, Atherton West Mills Ltd., Kanpur.
21. Sri Kishan Narain Mathur, Ganesh Flour Mills Ltd., Kanpur.
22. Sri Sohan Lal Singhania, Plastic Products Ltd., Kanpur.

23. Sri Haji Mohd. Hamza, U. P. Tanneries, Kanpur.
24. Sri Kali Charan, Kanpur Rolling Mills, Kanpur.
25. Sri W. W. Sutcliffe, Bitra Picker & Co., Kanpur.*
26. Sri P. K. Kohli, Kohli Ice & Cold Storage Co., Kanpur.*
27. Sri Sital Prasad, J. K. Woollen Manufacturers Ltd., Kanpur.
28. Sri Rameshwar Prasad, Nihal Chand Kishori Lal Oil Mills, Kanpur.
29. Sri A. H. Buckland, Atherton West Mills Ltd., Kanpur.
30. Sri Daya Ram, Matadin Bhagwan Das Oil Mills, Kanpur.
31. Sri Hit Saran Gupta, Rajendra Prasad Oil Mills, Kanpur.
32. Sri Ratan Lal Sharma, Duli Chand Umrao Lal Oil Mills, Kanpur.*
33. Sri Sardar Kripal Singh, Singh Plate Mills, Kanpur.
34. Sri K. J. D. Price, c/o Kanpur Chemical Works, Kanpur.*
35. Sri N. N. Suri, United Chemical Works Ltd., Kanpur.
36. Sri D. P. Bajoria, Ganga Oil Mills, Kanpur.
37. Sri E. C. Poyser, Imperial Chemical Industries, Kanpur.*
38. Sri Sheo Narain Agarwal, Prag Ice and Oil Mills, Aligarh.*
39. Sri Ved Prakash, Tika Ram and Sons Oil Mills, Aligarh.
40. Sri Babu Lal Singhal, Singhal Ice and Oil Mills, Aligarh.
41. Sri R. B. Lal, Bijli Cotton Mills Ltd., Hathras, Aligarh.*
42. Sri Dhanna Lal, Matrumal Oil Mills, Hathras, Aligarh.
43. Sri Durga Pershad Lohia, Basant Lal Hira Lal Oil Mills, Hathras, Aligarh.
44. Sri Mathura Prasad Agarwal, Agarwal Oil Mills, Agra.
45. Sri Subha Karan Sakesaria, Sri Mahalaxmi Oil Mills, Agra.*
46. Sri H. L. Tiwari, Mathusudan Industries Ltd., Agra.
47. Messrs. Sujan Chand Indra Weaving and Spinning Mills Ltd., Agra.
48. Sri Krishna Prasad Bhagwan, G. G. Industries, Agra.
49. Sri Niranjan Lal Poddar, Niranjan Lal Ramchandra, Agra.
50. Sri Chidanilal Jain, Jain Glass Works, Firozabad, District Agra.
51. Sri Hira Lal Verman, Ram Chand Spg. and Wvg. Mills, Hathras, Aligarh.
52. Sri N. A. Sherwani, Neoli Sugar Factory, District Etah.
53. Sri Durga Dutt Bhagat, B. P. Oil Mills, Agra.
54. Sri Seth Loon Karan Sathiya, Johns Mills, Agra.
55. Sri B. P. Agarwal, U. P. Oil Industries Ltd., Lucknow.
56. Sri R. R. Laxman Nigoskar, the Upper India Couper Paper Mills Ltd., Lucknow.*
57. Sri Ranjit Singh, Vikram Cotton Mills Ltd., Lucknow.
58. Sri Satya Narain Murarka, Messrs. Sri Shyamnath Oil Mills, Sitapur.

59. Sri P. C. Thirani, Oudh Sugar Mills Ltd., Hargaon. District Sitapur.
60. Sri H. Thomson, Plywood Products, Sitapur.
61. Sri Roshan Lal, Bara Banki Sugar Mills, Bara Banki.
62. Sri V. D. Jhunjhunwala, Motilal Kamlapat Sugar Mills Ltd., Motinagar (Masodha), Faizabad.
63. Sri R. P. Nevatia, Hindustan Sugar Mills Ltd., Golagokaranuath, Kheri.
64. Sri B. P. Halwasiya, Modern Homes, Lucknow.
65. Sri S. N. Tondon, Hindustan Tube-wells Construction, Lucknow.
66. Sri Seth Kishori Lal, Laxmiji Sugar Mills, Maholi, Sitapur.
67. Sri R. Robinson, Martin Burn Ltd., Lucknow.
68. Sri O. L. Tallery, A. Tallery & Sons Ltd., Bhadhoi, District Varanasi.
69. Sri Vibhuti Narain Singh, Vibhuti Glass Works, Ramnagar, Varanasi.
70. Sri Jyoti Bhushan Gupta, Banaras Cotton Mills Ltd., Varanasi.
71. Sri W. J. Oakely, Obettee Ltd., Mirzapur.
72. Sri Jagnmal Raja, Allahabad Glass Works, Naini, Allahabad.
73. Sri Raghu Nath Prasad, Sheo Shanker Oil Mills, Varanasi.
74. Sri Ranjit Lal Maheshwari, E. Sefton & Co., Mirzapur.
75. Sri Bala Din Ram, Kashi Iron Foundry, Varanasi.
76. Sri Kunj Behari Lal Gupta, Bharat Oil and Allied Industries, Chandausi, Moradabad.
77. Sri S. C. Varshney, U. P. Glass Works, Bahjoi, Moradabad.
78. Sri D. Mearthy, Western India Match Co., Ltd., Bareilly.*
79. Sri H. K. Srivastava, Raza Textile Mills Ltd., Rampur.
80. Sri V. H. Dalmia, Raza Sugar Mills, Rampur.
81. Sri Nawab of Rampur, Rampur.
82. Sri A. R. F. Webert, Rosa Sugar Works Distillery Carew & Co. Ltd., Shahjahanpur.
83. Sri Bisheshwar Dayal Mukut Lal Oil Mills, Khurja, Bulandshahr.
84. Sri Vishnu Datt, Ganga Glass Works, Balawali, District Bijnor.**
85. Sri Sahu Jagdish Prasad, Pilibhit.
86. Sri Gujar Mal Modi, Modi Industries, Modinagar, Meerut.
87. Sri Raizada K. M. Modi, Modi Weaving and Spinning Mills Ltd., Meerut.
88. Sri S. L. Jain Banshidhar Radhaballabh Oil Mills, Shikohabad, Mainpuri.*
89. Sri Girdhari Lal Bajaj, Managing Director, Messrs. Amrit Vanaspati, Ghaziabad.*
90. Sri Sheo Prasad, Lord Krishna Weaving and Spinning Mills Saharanpur.
91. Sri R. R. Khemka, Radha Krishna Cold Storage Ice and Cold Mills. Saharanpur.

92. Sri Nand Kishore Bajoria, Star Paper Mills Ltd., Saharanpur.
93. Tobacco Manufacturers (India) Ltd., Saharanpur.
94. Sri Hari Raj Swaroop Sri Shadilal Sugar Mills, Mansurpur, Muzaffarnagar.
95. Sri Rajendra Lal, Upper Doab Sugar Mills, Shamli, Muzaffarnagar.
96. Sri Banarasi Dass, Jaswant Sugar Mills, Meerut.
97. Sri Chet Ram, Daurala Sugar Mills, Meerut.
98. Sri P. D. Maskara, Mahabir Jute Mills Ltd., Sahajanwa, Gorakhpur.*
99. Sri Desh Raj Narang, Basti Sugar Mills, Basti.
100. Sri R. B. Laxmandass, Messrs. R. B. Laxmandass & Sons Sugar Mills Ltd., Jarwal Road, Bahraich.
101. Sri Bihari Lal, Shiv Rice Mills, Bahraich.
102. Sri A. Caws, Partabpur Sugar Factory, Mairwa, Deoria or Messrs. Beggs, Sutherland & Co., Ltd., Kanpur.
103. Sri Surendra Singh Majithia, Surya Sugar Factory, Gorakhpur.
104. Sri Balmukund Shahni, Ramkola Sugar Mills, Ramkola, Deoria.
105. Sri Kedar Nath Khetan, Maheshwari Khetan Sugar Mills, Ramkola, Deoria.
106. Sri Karam Chand Thapar, Baitalpur Sugar Mills, Baitalpur, Deoria.
107. Sri Kishan Deo, Nawabganj Sugar Factory, Nawabganj Gonda.*
108. Sri Kundan Lal, Shiva Pershad Banarsi Dass Sugar Mills, Bijnor.
109. Sri Surendra Kumar, Indian Implements Manufacturing Co., Ltd., Marris Road, Aligarh.
110. Messrs. Popular Cycle Manufacturing Co., Ltd., Agra.*
111. Sri Gopal Metal Works (Cycle Manufacturers), Aishbagh, Lucknow.

IV REPRESENTATIONS WERE ALSO RECEIVED FROM THE FOLLOWING CLOSED FACTORIES

1. Messrs. Sri Rameshwar Oil Mills, Jamuna Bank Road, Allahabad.*
2. Messrs. Agarwal Oil Mills, Allahabad.*
3. Messrs. Sakseria Oil and Dal Mills, Hathras.*
4. Messrs. Victoria Oil Industries, Bareilly.*
5. Messrs. Goenka Oil Mills, Khurja, Bulandshahr.*
6. Messrs. U. P. Oil and Food Products, Ganjdudwara, Etah.*
7. Messrs. H. K. Saraf Oil Mills, Lalitpur, Jhansi.*
8. Messrs. Ganga Oil Mills, Kanpur.*
9. Messrs. Northern India Oil Industries Ltd., Kanpur.*
10. Messrs. Chhotey Lal Jagannath Pd., Oil Mills, Bharthana, (Etawah).*
11. Messrs. Sansar Oil Mills and Glass Mills Ltd., Shahganj, Jaunpur.*

12. The Mallik Engineering Works, Maldahia Cantt., Varanasi.*
13. Messrs. Narang Industries Ltd. (Starch), P. O. Sugar Factory, Nawabganj, Gonda.*
14. Messrs. The Indian Bobbin Factory, P. O. Clutterbuckganj, Bareilly.*
15. Messrs. S. N. Industries Ltd., Gwalior Road, Jhansi.*
16. Messrs. Spencer & Co., Ltd., Carbonic Gas, Dry Ice and Cold Storage Factory, G. T. Road, Kanpur.*
17. Messrs. Banaras Cotton and Silk Mills Ltd., Chaulkaghat, Varanasi.*
18. Messrs. Dayalbagh Textile Mills Ltd., Agra.*
19. Messrs. Indra Spinning and Weaving Mills, Agra.*
20. Messrs. Lallamal Hardev Dass Cotton and Spinning Mills, Sadabad Gate, Hathras (Aligarh).*
21. Messrs. Sachendi Cotton Mills, Sachendi, District, Kanpur.*
22. Messrs. Shri Radha Kishan Mills, Mirzapur.*
23. Messrs. Moradabad Spinning and Weaving Mills Co., Ltd., Moradabad.*
24. Messrs. Bhadohi Textiles Industries Ltd., Bhadohi, Varanasi.*
25. Messrs. Parma Nand Yashoda Nand, 96/15 Colonelganj Road, Kanpur.
26. Messrs. Technical Corporation Ltd., Premnagar, Mathura.*
27. Messrs. Anglo Dutch Paint, Colours, Varnish Works Ltd., Mohiuddinpur, District Meerut.*
28. The Ravi Hosiery Engineering Works, G. T. Road, Sahadra Meerut.*
29. Messrs. Modern Metal Industries Ltd., Rampur.*
30. Messrs. Indian Chemical Laboratories and Metal Works, Varanasi.*
31. The Ratan Sugar Mills Ltd., Shahganj, District Jaunpur *
32. Messrs. Wholemeal Atta Mills, Bara Banki.*

ANNEXURE No. 9

Names of witnesses examined by the Sub-Committees

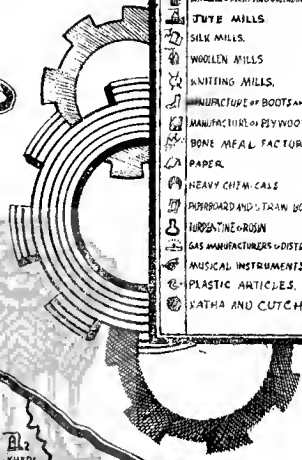
1. Sri S. N. Agarwal, President of the U. P. Oil Millers Association, Kanpur.
2. Sri Mukimdi Lal, Secretary, Messrs. Indian Bobbin Factory Ltd., Bareilly.
3. Sri T. N. Javcri, representing Juhi Mills Branch of the British India Corporation (Kakomi Mills), Kanpur.
4. Sri Bhola Nath Bahal on behalf of Messrs. Indian Chemical Laboratory, Varanasi.
5. Sri Babu Lal Sakseria on behalf of Messrs. Radha Krishan Mills, Mirzapur.
6. Messrs. S. N. Industries, Jhansi.
7. Sri Sitaram Bhavasinka, President of the Indian Sugar Mills Association, East U. P. Branch, Gorakhpur.
8. Sri Shri Kishan Lal Chand, Proprietor, Tribeni Sugar Mills, Naini.
9. Sri Kishan Chand, Proprietor, Sri Krishna Desi Sugar Works, Jhusi.
10. Sri G. L. Sahgal, Proprietor Sri Sardar Sugar Mills, Village Rani Chandra, P. O. Nichaul, District Gorakhpur.
11. Sri S. R. Kohli, Ramkola Sugar Mills, Ramkola, District Deoria.
12. Sri Om Prakash, representing Indian Distillery, Anwarganj, Kanpur.
13. Sri Shri Krishna Kaul, representing Moradabad Spinning and Weaving Mills, Moradabad.
14. Sri Krishan Narain, Proprietor, Ganesh Flour Mills, Kanpur.
15. Mr. Hill, Director of British India Corporation.
16. Sri Yashodanand on behalf of Parmanand Yashodhanand, Kanpur.
17. Sri P. N. Garg, representing Messrs. Northern India Trading Co., Kanpur.
18. Sri P. D. Tewari, representing Messrs. H. Bevis & Co., Kanpur.
19. Sri Padampat Singhanian, Kamla Tower, Kanpur.
20. Sri S. B. Singh, Director of Agriculture, U. P., Lucknow.
21. Sri Dubey, Deputy Cane Commissioner, U. P., Lucknow.
22. Sri J. B. Krishnan, Secretary of the Merchants Chamber of Commerce, U. P., Kanpur.
23. Sri S. N. Gundu Rao, Director of Indian Institute of Sugar Technology, Kanpur.
24. Sri S. M. Bashir, Bar-at-law, Director In-charge, J. K. Iron and Steel Co., Ltd., Kanpur.
25. Dr. D. P. Singh, Economic Botanist.
26. Sri P. D. Singhanian, Director, J. K. Group of Industries, Kanpur.

27. Sri S. N. Nigam, Chief Inspector of Boilers, U. P., Kanpur.
28. The Representative of Upper India Chamber of Commerce, Kanpur.
29. The Representative of Northern India Mercantile Chamber of Commerce, 100 Carlton Hotel, Lucknow.
30. The Representative of the National Chamber of Industries and Commerce, Agra.
31. The Representative of Aligarh Lock Manufacturers and Traders Association, Aligarh.
32. The Representative of the Kanpur Chemical Works Ltd., P. B. No. 27, Kanpur.
33. The Representative of Jaswant Sugar Mills, Meerut City.
34. The Representative of the Indian Sugar Mills Association Ltd., Kanpur.
35. The Representative of U. P. Cycle Manufacturers Co-operative Association Ltd., Kanpur.



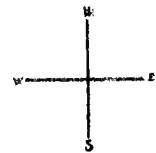
MAP SHOWING LOCATION OF FACTORIES WITH 50 OR MORE WORKERS.

AGRICULTURAL IMPLEMENTS	MATTEI FACTORY
GENEALING TOBACCO ENGINEERING.	RUBBER AND RUBBER PRODUCTS
MANUFACTURE OF BICYCLES.	PAINTS (COLORS & VARNISHES)
COILS AND GINNING AND BAIING	METAL ROLLING (FERROUS)
SUNN-HEMP PRESSES	TANNERIES AND LEATHER FINISHING
FLUOR MILLS.	DRUGS
CANNING & PRESERVATION OF FRUITS	SAFE AND VAULTS
SUGAR FACTORIES AND REFINERIES	METAL FOUNDRY FERROUS
TOBACCO OILS	GLASS AND GLASS PRODUCTS
SUGAR CONFECTIONERY, COCA-CHOCOLATE	CHINA POTTERY & EARTHEN WARE
TEA FACTORIES	LUGGS
HYDROGENATED OIL INDUSTRIES	METAL GALVANIZING, TANNING,
CIGARETTE	LACQUERS & POLISHES
TEXTILES & WEAVING & DYEING & SPIRITS	METAL FOUNDRY NON-FERROUS
TUBE MILLS.	DAIRY PRODUCTS
SILK MILLS.	RICE MILLS
WOOLLEN MILLS	BAKERY PRODUCTS
KNITTING MILLS.	COTTON MILLS
MANUFACTURE OF BOOTS AND SHOES.	OPIMUM FACTORY
MANUFACTURE OF PLYWOOD	PHARMACEUTICAL CHEMICALS.
BONE MEAL FACTORIES.	LAC INCLUDING SHELLAC
PAPER.	MANUFACTURE OF CEMENT.
HEAVY CHEMICALS	HOME - PIPE.
PAPERBOARD AND STRAIN (BOARD)	COACH BUILDING.
TOBACCO ENGINEERING	MANUFACTURE OF SCIENTIFIC PROFESSIONAL
GAS MANUFACTURERS & DISTRIBUTORS	MEASURING & CONTROLLING INSTRUMENTS
MUSICAL INSTRUMENTS	COTTON WASTE.
PLASTIC ARTICLES.	DRAWING & SURVEYING INSTRUMENTS.
SATHA AND CUTCH.	



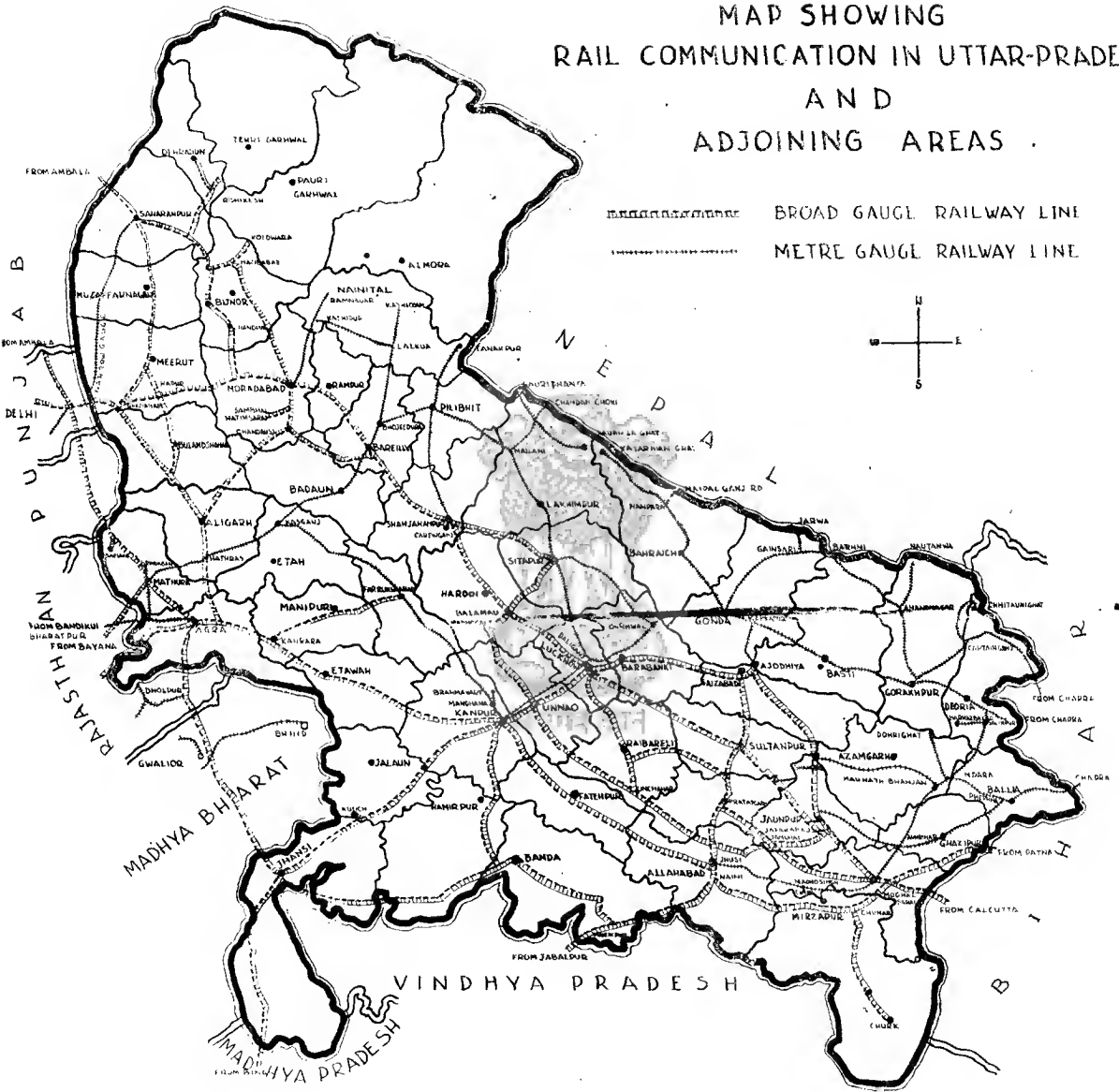
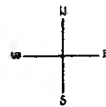
MAP OF UTTAR PRADESH SHOWING DEVELOPMENT OF ELECTRICITY.

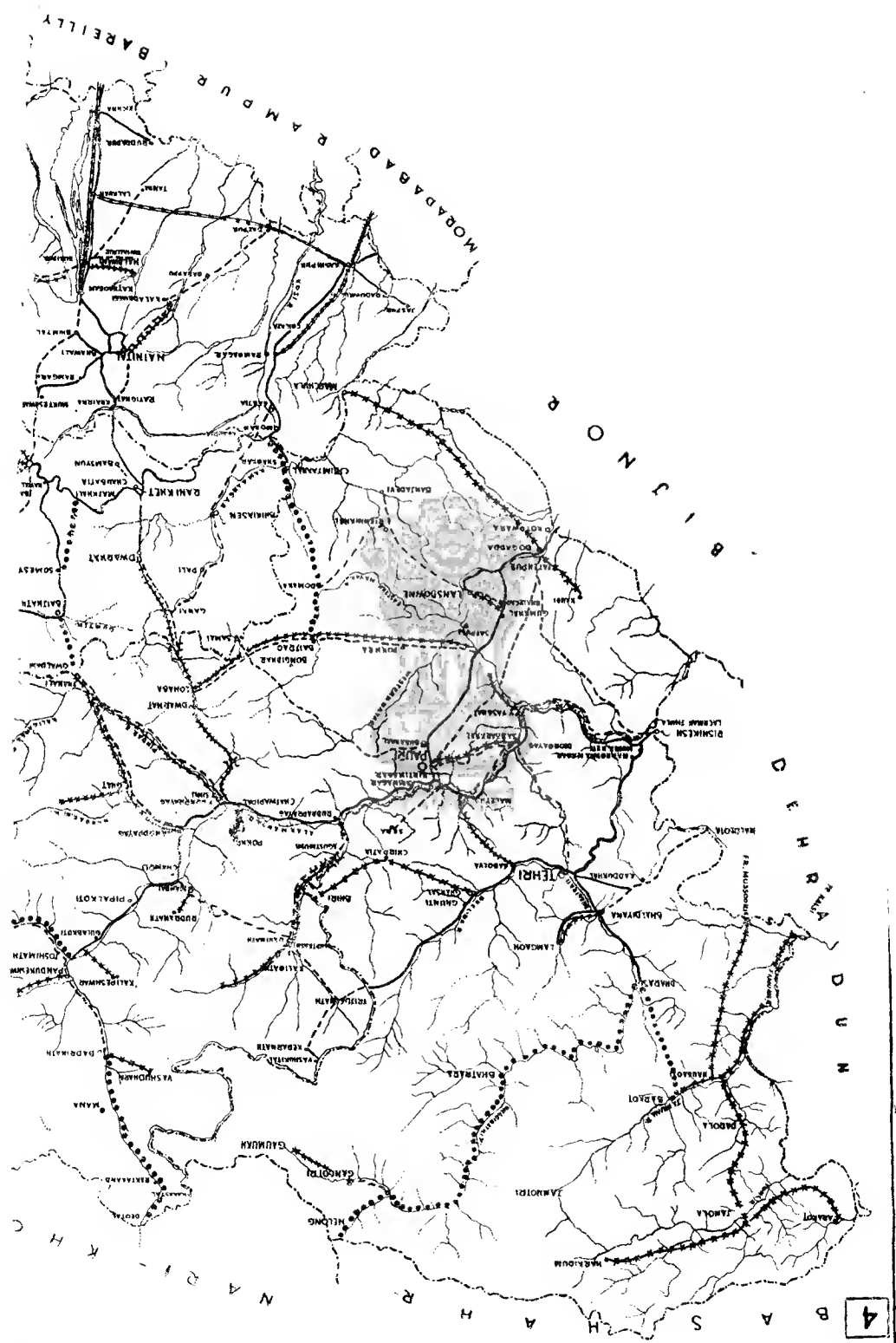
REFERENCES.				
POWER STATIONS	BEFORE 1st 5 YEARS PLAN			
" "	UNDER	" "	" "	○
" "	" "	" "	" "	●
SUB	BEFORE 1st	" "	" "	△
" "	UNDER	" "	" "	△
" "	" "	" "	" "	△
TRANSMISSION LINES	BEFORE 1st	" "	" "	—
" "	UNDER	" "	" "	—
" "	" "	" "	" "	—



MAP SHOWING RAIL COMMUNICATION IN UTTAR-PRADESH AND ADJOINING AREAS .

———— BROAD GAUGE RAILWAY LINE
- - - - - METRE GAUGE RAILWAY LINE





MAP of UTTAR PRADESH

SHOWING RIVERS, CANAL SYSTEM AND DISCHARGE SITES

SCALE 1 INCH = 16 MILES

REFERENCES

DISTRICT BOUNDARIES	INDICATED BY DOTTED LINES
RAILWAYS	INDICATED BY SOLID LINES
MAJOR CANALS	INDICATED BY THICK SOLID LINES
DISCHARGE SITES	INDICATED BY SMALL CIRCLES
RAILROAD HEAD QUARTERS	INDICATED BY SMALL SQUARES

